Tools to Manage Jamf Pro(s) at Scale

Ryan Ball
Director of Engineering

Sam Gibbs
Mac Consulting Engineer

Andrew Myers
Mac Consulting Engineer

Alectrona

Problem: Configuring new Jamf Pro servers regularly can be messy

Problem: Configuring new Jamf Pro servers regularly can be messy

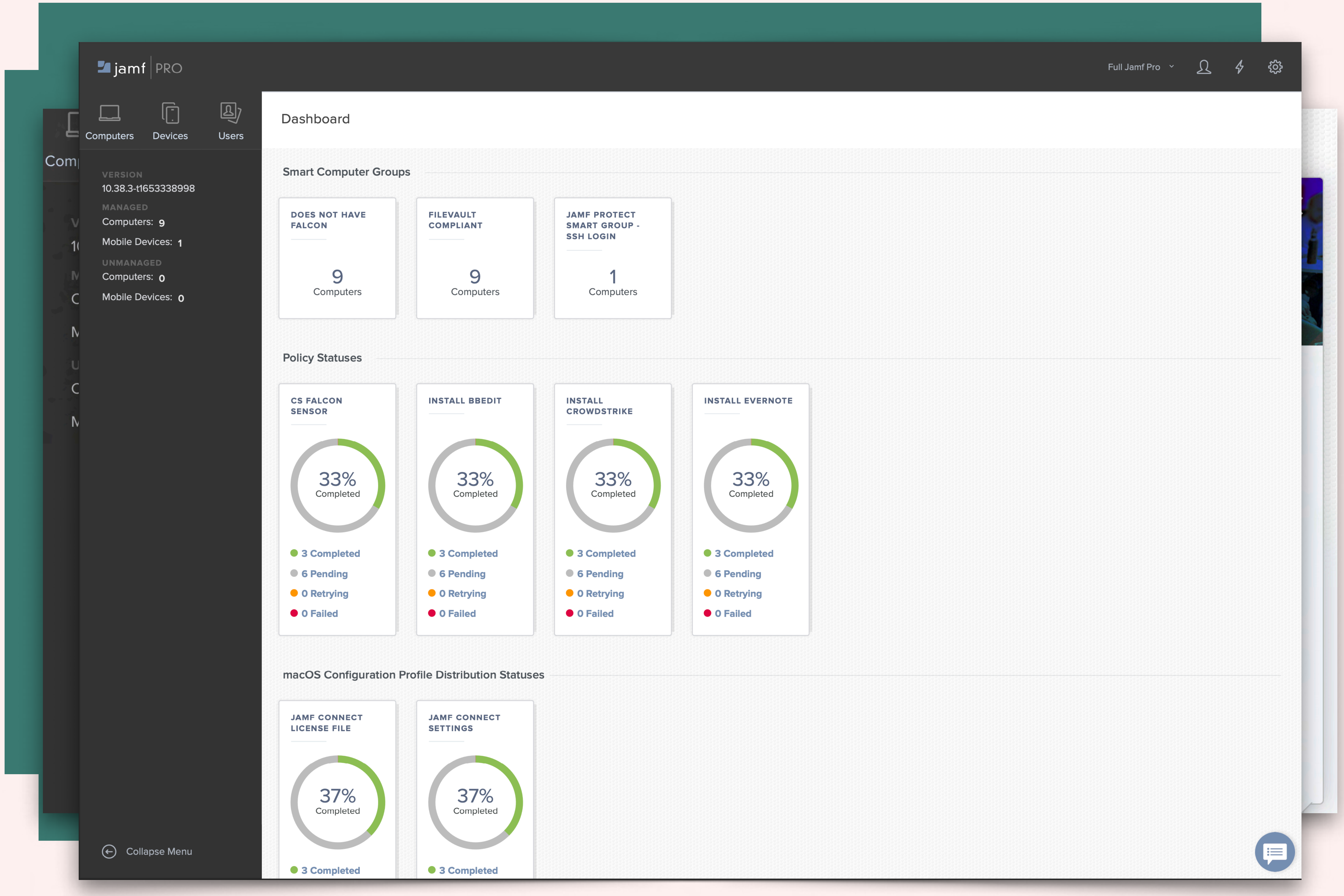
If you frequently provision new Jamf Pro instances, you know that configuring each new instance appropriately can be a time consuming and frustrating experience

Follow along to see how adhering to a standard setup formula can bring some order to your (and your teams) life! 🤩

From a Blank Canvas…

- Create an expected baseline
- Have a consistent experience across all of your instances
- Configure it quickly! ⏱

…Your Ideal Jamf Instance



jamf PRO

Full Jamf Pro

Computers Devices Users

VERSION
10.38.3-t1653338998

MANAGED
Computers: 9
Mobile Devices: 1

UNMANAGED
Computers: 0
Mobile Devices: 0

Collapse Menu

Dashboard

Smart Computer Groups

DOES NOT HAVE FALCON
9
Computers

FILEVAULT COMPLIANT
9
Computers

JAMF PROTECT SMART GROUP - SSH LOGIN
1
Computers

Policy Statuses

CS FALCON SENSOR
33% Completed
3 Completed
6 Pending
0 Retrying
0 Failed

INSTALL BBEDIT
33% Completed
3 Completed
6 Pending
0 Retrying
0 Failed

INSTALL CROWDSTRIKE
33% Completed
3 Completed
6 Pending
0 Retrying
0 Failed

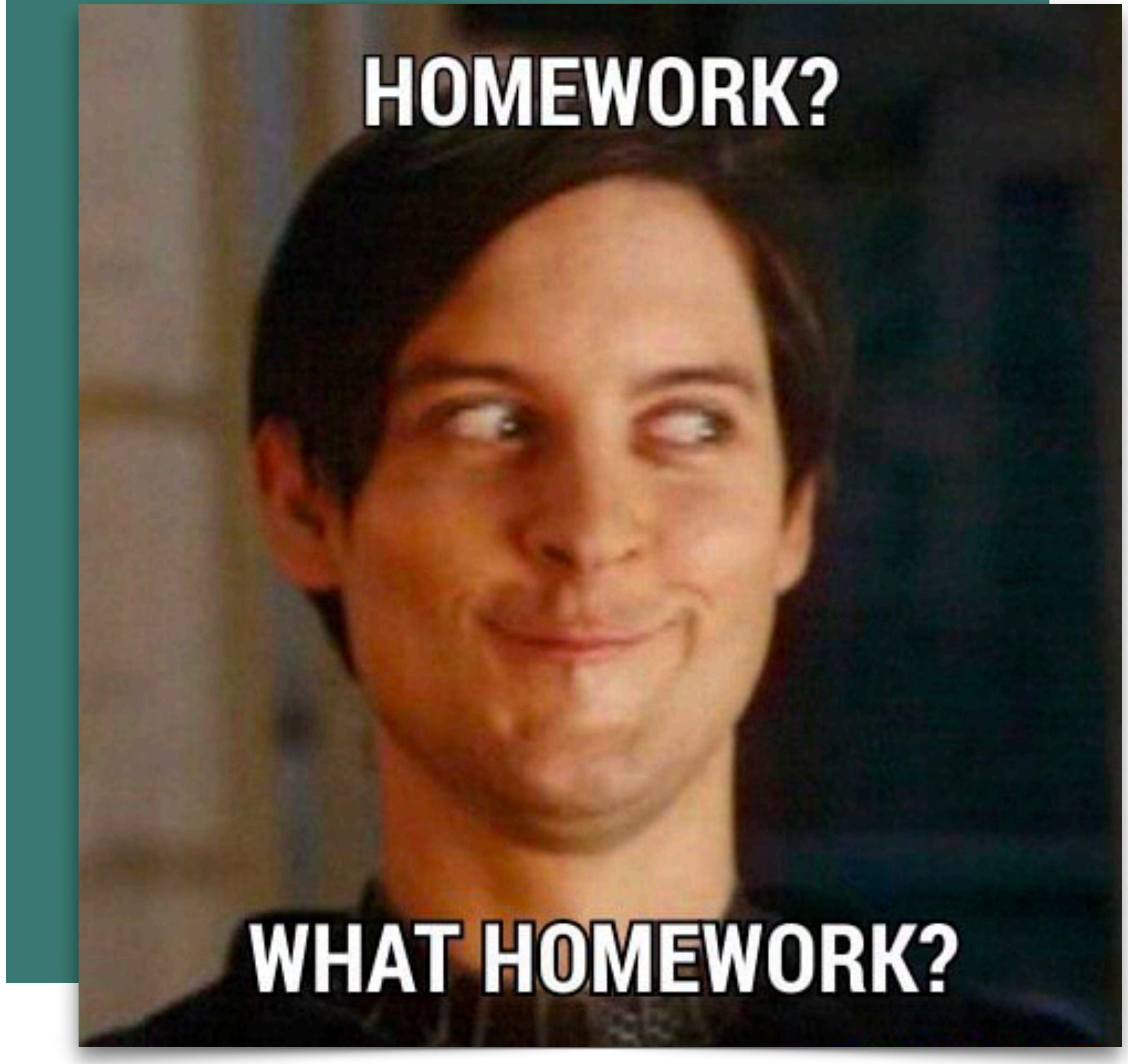
INSTALL EVERNOTE
33% Completed
3 Completed
6 Pending
0 Retrying
0 Failed

macOS Configuration Profile Distribution Statuses

JAMF CONNECT LICENSE FILE
37% Completed
3 Completed

JAMF CONNECT SETTINGS
37% Completed
3 Completed

Source: Jamf, https://docs.jamf.com/10.41.0/jamf-pro/documentation/The_Jamf_Pro_Dashboard.html



Homework First

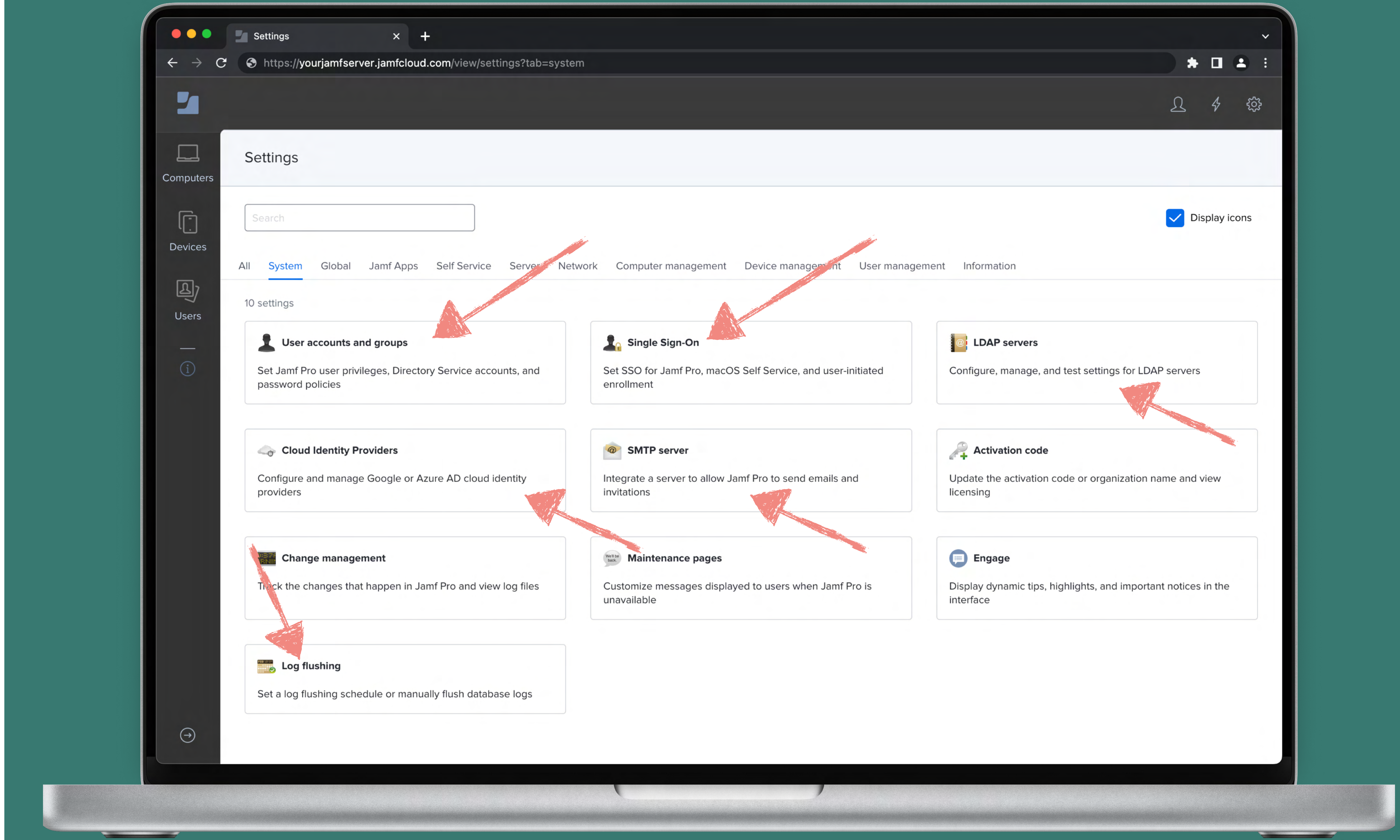
Create unique:

- Instance name
- Apple ID(s) for APNS, ABM/ASM
- Jamf ID (if applicable)
- Email Service Account
- Slack/Teams channel(s)

Settings...

Follow a set guideline 📝 to get the base Jamf Pro settings configured the way you want.

- System:
  - User Accounts and SSO
  - Cloud Identity / LDAP Server
  - SMTP server and Notifications
  - Log flushing



Settings

10 settings

User accounts and groups
Set Jamf Pro user privileges, Directory Service accounts, and password policies

Single Sign-On
Set SSO for Jamf Pro, macOS Self Service, and user-initiated enrollment

LDAP servers
Configure, manage, and test settings for LDAP servers

Cloud Identity Providers
Configure and manage Google or Azure AD cloud identity providers

SMTP server
Integrate a server to allow Jamf Pro to send emails and invitations

Activation code
Update the activation code or organization name and view licensing

Change management
Track the changes that happen in Jamf Pro and view log files

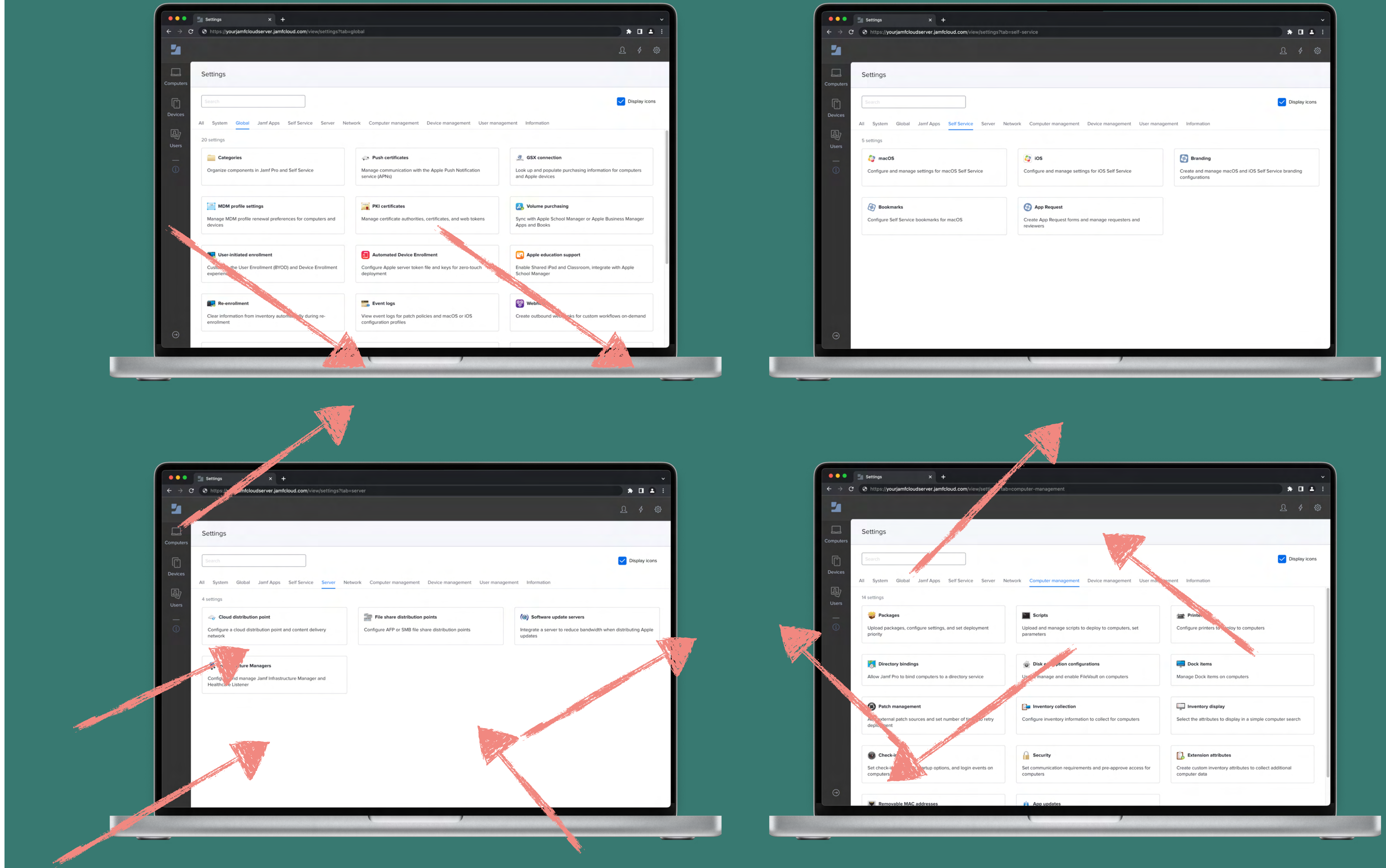
Maintenance pages
Customize messages displayed to users when Jamf Pro is unavailable

Engage
Display dynamic tips, highlights, and important notices in the interface

Log flushing
Set a log flushing schedule or manually flush database logs

…more Settings 😬

- Global
  - APNS certificate
  - Automated Device Enrollment & VPP
  - User Initiated Enrollment
  - Re-Enrollment
- Self Service
  - macOS
  - Branding
- Server
- Computer Management
  - Check-in
  - Inventory Collection
  - App Updates



Settings

https://yourjamfcloudserver.jamfcloud.com/view/settings?tab=global

Settings

☑ Display icons

All System Global Jamf Apps Self Service Server Network Computer management Device management User management Information

20 settings

Categories Organize components in Jamf Pro and Self Service

Push certificates Manage communication with the Apple Push Notification service (APNs)

GSX connection Look up and populate purchasing information for computers and Apple devices

MDM profile settings Manage MDM profile renewal preferences for computers and devices

PKI certificates Manage certificate authorities, certificates, and web tokens

Volume purchasing Sync with Apple School Manager or Apple Business Manager Apps and Books

User-initiated enrollment Cust the User Enrollment (BYOD) and Device Enrollment experien

Automated Device Enrollment Configure Apple server token file and keys for zero-touch deployment

Apple education support Enable Shared iPad and Classroom, integrate with Apple School Manager

Re-enrollment Clear information from inventory autom lly during re-enrollment

Event logs View event logs for patch policies and macOS or iOS configuration profiles

Webh Create outbound we ks for custom workflows on-demand

Settings

https://yourjamfcloudserver.jamfcloud.com/view/settings?tab=self-service

Settings

☑ Display icons

All System Global Jamf Apps Self Service Server Network Computer management Device management User management Information

5 settings

macOS Configure and manage settings for macOS Self Service

iOS Configure and manage settings for iOS Self Service

Branding Create and manage macOS and iOS Self Service branding configurations

Bookmarks Configure Self Service bookmarks for macOS

App Request Create App Request forms and manage requesters and reviewers

Settings

https:// mfcloudserver.jamfcloud.com/view/settings?tab=server

Settings

☑ Display icons

All System Global Jamf Apps Self Service Server Network Computer management Device management User management Information

4 settings

Cloud distribution point Configure a cloud distribution point and content delivery network

File share distribution points Configure AFP or SMB file share distribution points

Software update servers Integrate a server to reduce bandwidth when distributing Apple updates

ture Managers Config nd manage Jamf Infrastructure Manager and Healthc e Listener

Settings

https://yourjamfcloudserver.jamfcloud.com/view/setti tab=computer-management

Settings

☑ Display icons

All System Global Jamf Apps Self Service Server Network Computer management Device management User ma ment Information

14 settings

Packages Upload packages, configure settings, and set deployment priority

Scripts Upload and manage scripts to deploy to computers, set parameters

Printe Configure printers to ploy to computers

Directory bindings Allow Jamf Pro to bind computers to a directory service

Disk ption configurations Us manage and enable FileVault on computers

Dock items Manage Dock items on computers

Patch management A xternal patch sources and set number of ti o retry depl ent

Inventory collection Configure inventory information to collect for computers

Inventory display Select the attributes to display in a simple computer search

Check-i Set check-i rtup options, and login events on computers

Security Set communication requirements and pre-approve access for computers

Extension attributes Create custom inventory attributes to collect additional computer data

Removable MAC addresses

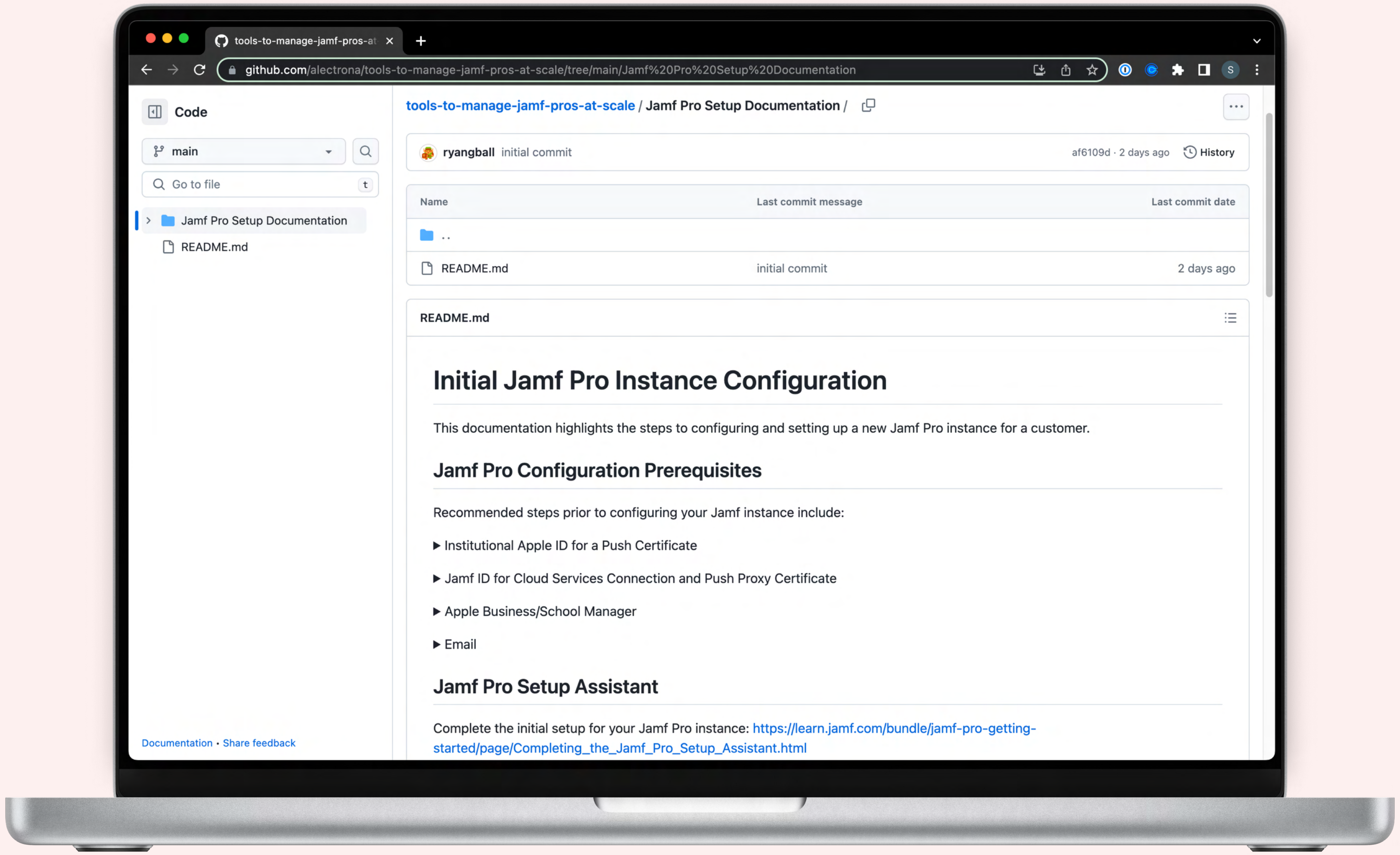
App updates

Alectrona.com

Here's a little something…

Free Documentation

On our GitHub repo, you'll find a detailed document covering our recommended settings for configuring a new Jamf Pro instance.



tools-to-manage-jamf-pros-at
github.com/alectrona/tools-to-manage-jamf-pros-at-scale/tree/main/Jamf%20Pro%20Setup%20Documentation
Code
main
Go to file
t
Jamf Pro Setup Documentation
README.md
Documentation · Share feedback

tools-to-manage-jamf-pros-at-scale / Jamf Pro Setup Documentation /

ryangball initial commit af6109d · 2 days ago History

Name	Last commit message	Last commit date
..		
README.md	initial commit	2 days ago

README.md

Initial Jamf Pro Instance Configuration

This documentation highlights the steps to configuring and setting up a new Jamf Pro instance for a customer.

Jamf Pro Configuration Prerequisites

Recommended steps prior to configuring your Jamf instance include:

▶ Institutional Apple ID for a Push Certificate

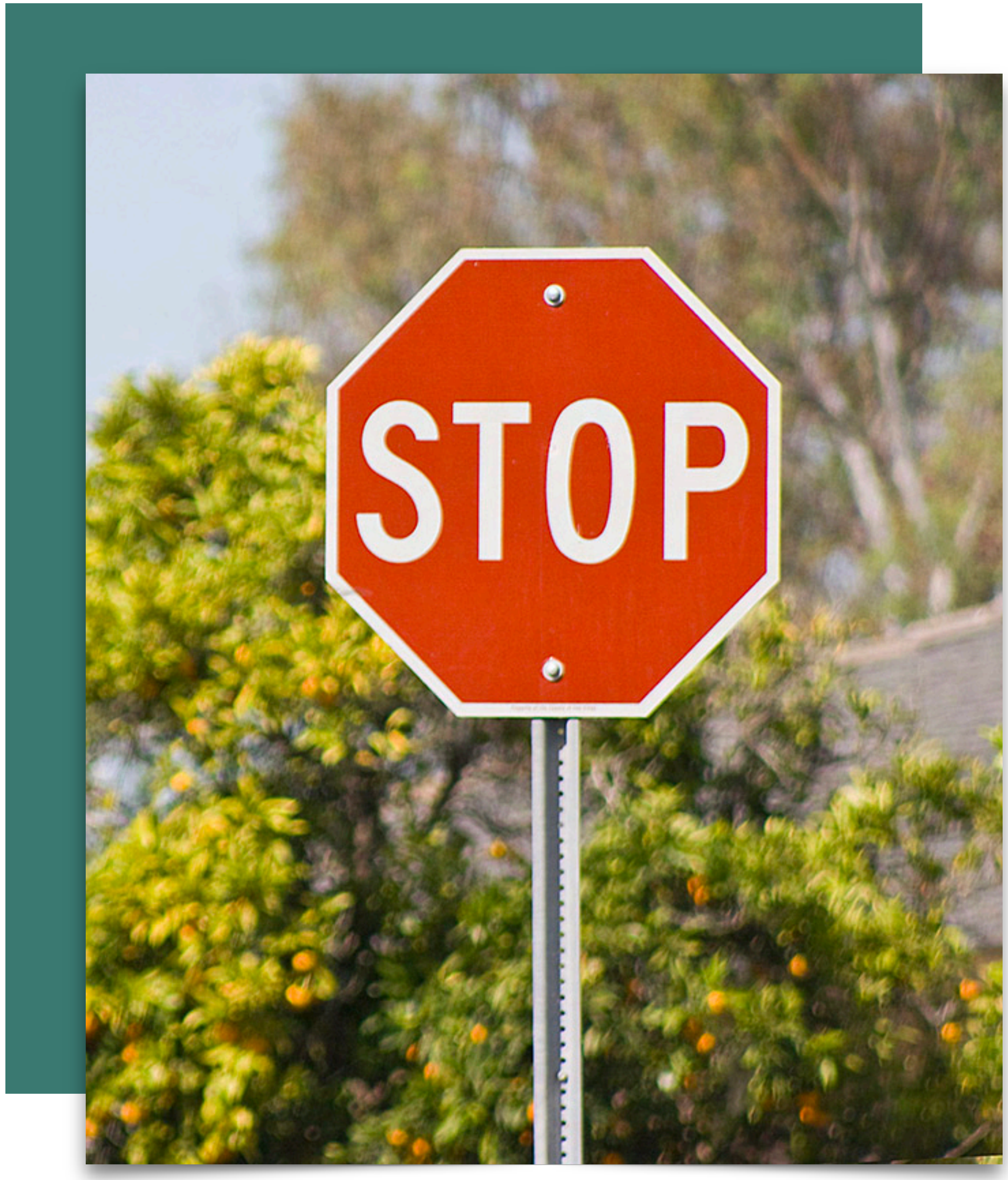
▶ Jamf ID for Cloud Services Connection and Push Proxy Certificate

▶ Apple Business/School Manager

▶ Email

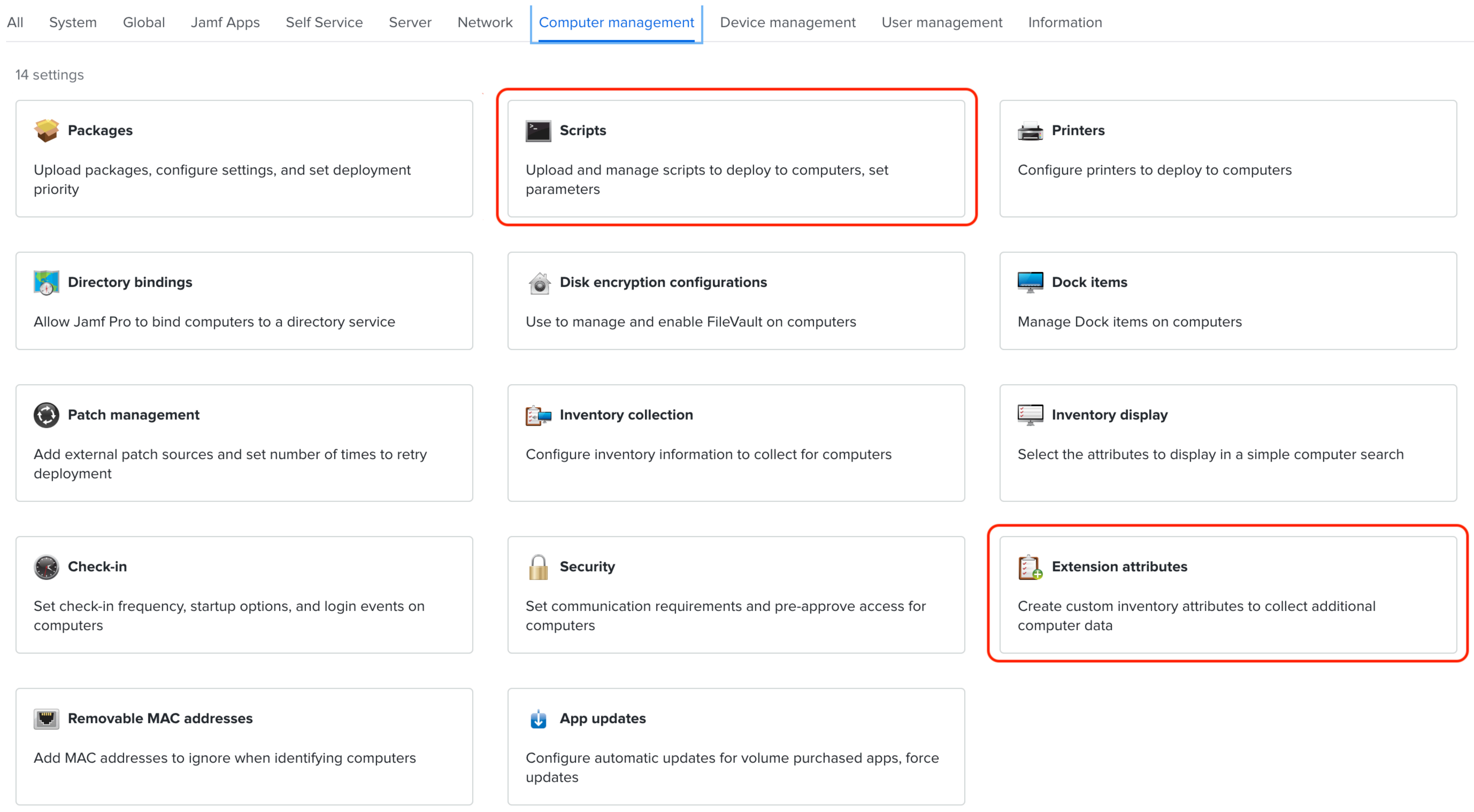
Jamf Pro Setup Assistant

Complete the initial setup for your Jamf Pro instance: https://learn.jamf.com/bundle/jamf-pro-getting-started/page/Completing_the_Jamf_Pro_Setup_Assistant.html



Don’t Forget

- Set your preferred timezone, language, notification, search, and inventory display settings
- Set reminders to renew APNS, Automated Enrollment, and VPP tokens annually
- Create service/API accounts as needed
- Add this new instance any existing CI or process improvement workflow
- Discuss and plan end user enrollments



14 settings

Packages
Upload packages, configure settings, and set deployment priority

Scripts
Upload and manage scripts to deploy to computers, set parameters

Printers
Configure printers to deploy to computers

Directory bindings
Allow Jamf Pro to bind computers to a directory service

Disk encryption configurations
Use to manage and enable FileVault on computers

Dock items
Manage Dock items on computers

Patch management
Add external patch sources and set number of times to retry deployment

Inventory collection
Configure inventory information to collect for computers

Inventory display
Select the attributes to display in a simple computer search

Check-in
Set check-in frequency, startup options, and login events on computers

Security
Set communication requirements and pre-approve access for computers

Extension attributes
Create custom inventory attributes to collect additional computer data

Removable MAC addresses
Add MAC addresses to ignore when identifying computers

App updates
Configure automatic updates for volume purchased apps, force updates

Wait a minute!

What about …

- Scripts?
- Extension Attributes?
- Policies?
- Packages?
- Restricted Software?!

Problem: Populating new Jamf Pro servers consistently can be daunting

Problem: Populating new Jamf Pro servers consistently can be daunting

If you manage a lot of Jamf Pro servers and often provision new servers, you know that populating all of the objects in a new Jamf Pro server can be challenging.

Let us show you how to use a template Jamf Pro server to populate a new Jamf Pro server! 🤩

Jamf Migrator can save you heaps of time

> ***A tool to migrate data granularly between Jamf Pro servers.***

Maintained by Jamf

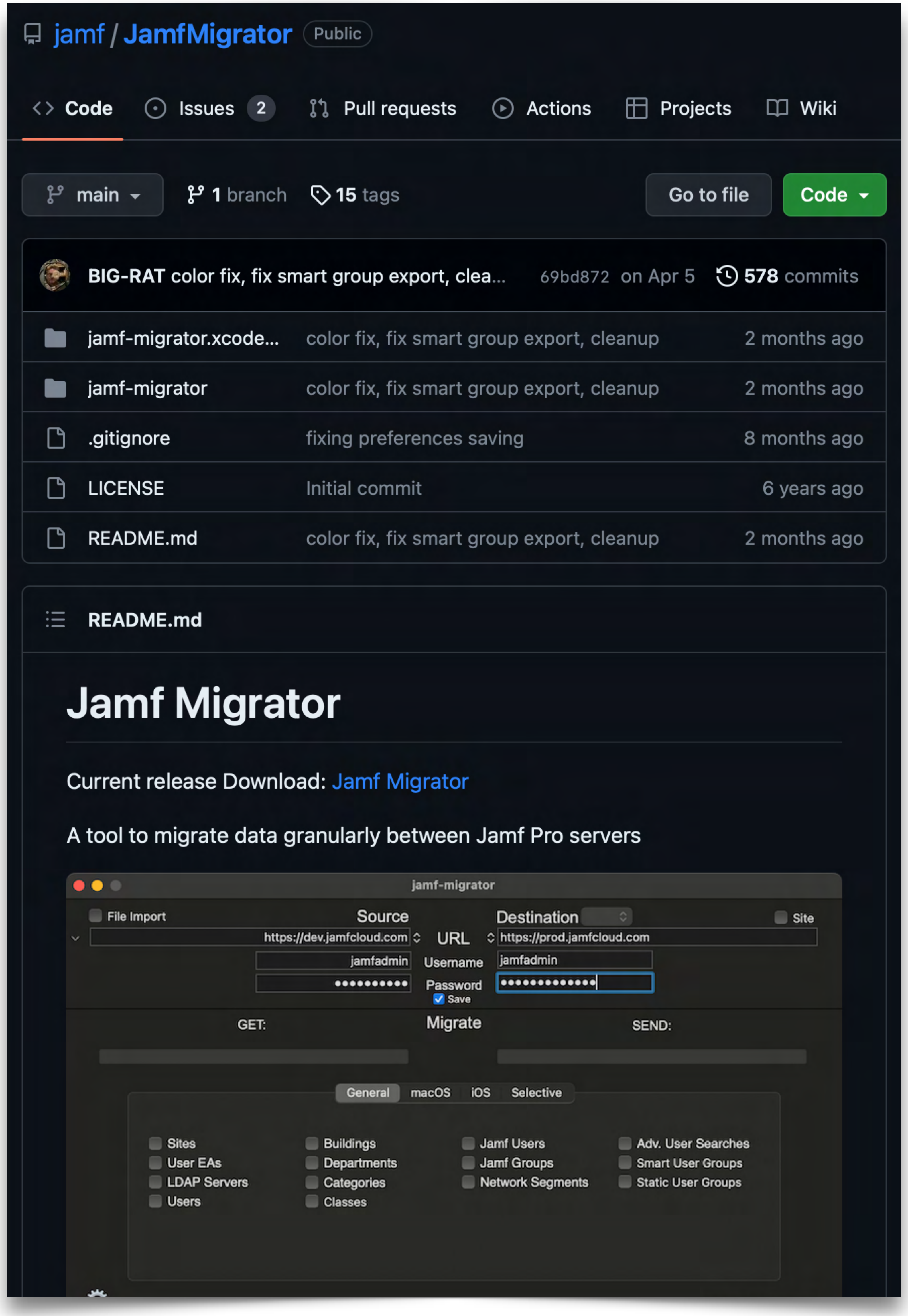
Regularly updated by Jamf to include new features and fixes.

You’re in control

Choose exactly which objects you want to migrate.

Saves you time and money 💰

Populate of the low hanging fruit of a Jamf Pro server before moving on to the custom objects.



jamf / JamfMigrator Public

BIG-RAT color fix, fix smart group export, clea... 69bd872 on Apr 5 578 commits

jamf-migrator.xcode...	color fix, fix smart group export, cleanup	2 months ago
jamf-migrator	color fix, fix smart group export, cleanup	2 months ago
.gitignore	fixing preferences saving	8 months ago
LICENSE	Initial commit	6 years ago
README.md	color fix, fix smart group export, cleanup	2 months ago

README.md

Jamf Migrator

Current release Download: Jamf Migrator

A tool to migrate data granularly between Jamf Pro servers

jamf-migrator

□ File Import

	Source		Destination
	https://dev.jamfcloud.com	URL	https://prod.jamfcloud.com
	jamfadmin	Username	jamfadmin
	••••••••••	Password	•••••••••••••

☑ Save

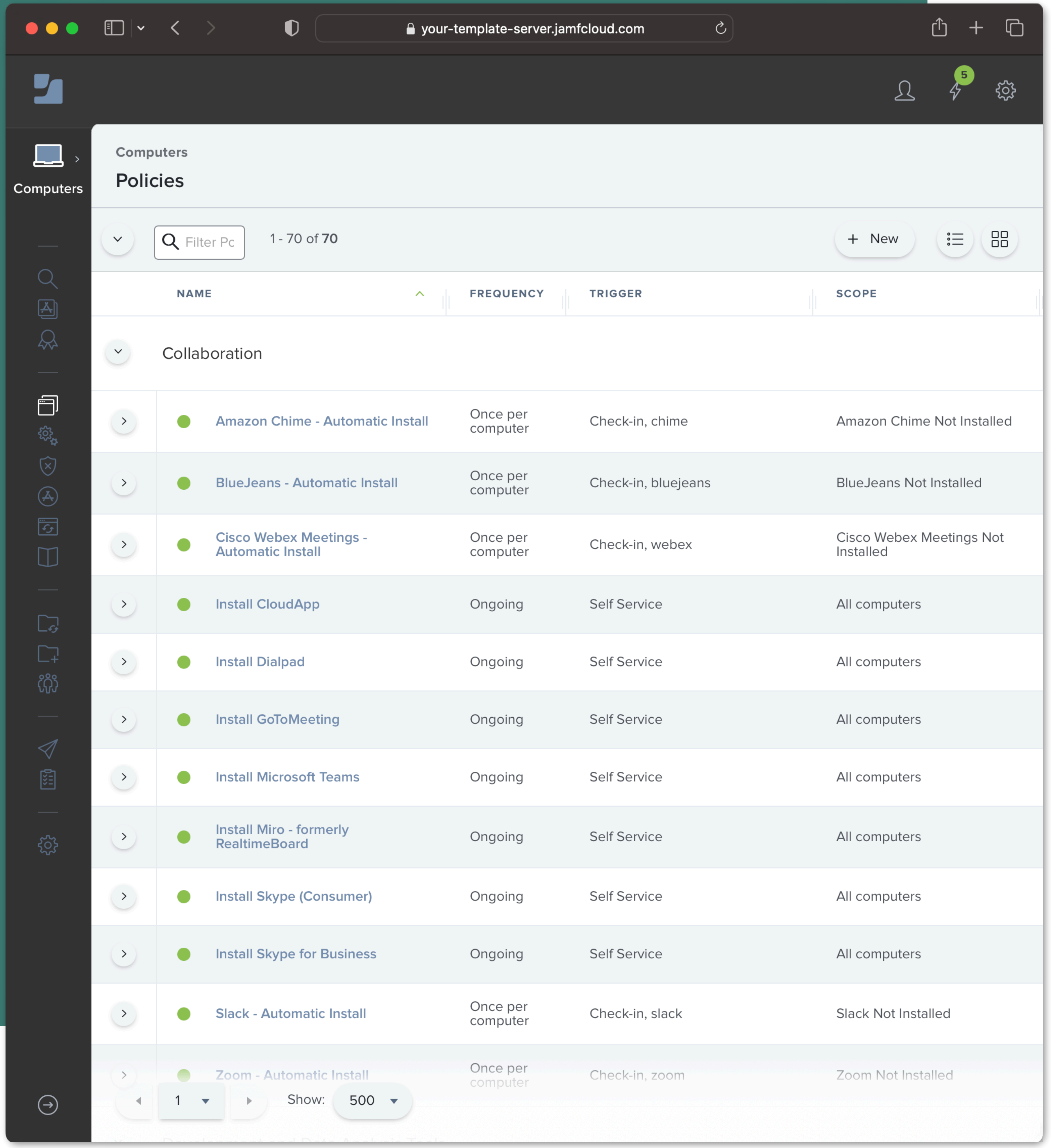
Source: Jamf, https://github.com/jamf/JamfMigrator

Disclaimer

✗ This is not a Jamf Migrator tutorial

✗ This is not about migrating a production Jamf Pro server to another

✓ This is about the concept of leveraging a template Jamf Pro server and using it as a source for other Jamf Pro servers



NAME	FREQUENCY	TRIGGER	SCOPE
Collaboration			
Amazon Chime - Automatic Install	Once per computer	Check-in, chime	Amazon Chime Not Installed
BlueJeans - Automatic Install	Once per computer	Check-in, bluejeans	BlueJeans Not Installed
Cisco Webex Meetings - Automatic Install	Once per computer	Check-in, webex	Cisco Webex Meetings Not Installed
Install CloudApp	Ongoing	Self Service	All computers
Install Dialpad	Ongoing	Self Service	All computers
Install GoToMeeting	Ongoing	Self Service	All computers
Install Microsoft Teams	Ongoing	Self Service	All computers
Install Miro - formerly RealtimeBoard	Ongoing	Self Service	All computers
Install Skype (Consumer)	Ongoing	Self Service	All computers
Install Skype for Business	Ongoing	Self Service	All computers
Slack - Automatic Install	Once per computer	Check-in, slack	Slack Not Installed
Zoom - Automatic Install	Once per computer	Check-in, zoom	Zoom Not Installed

First, your template

Create a template Jamf Pro server that contains all of the **standard** objects that should exist in **every** Jamf Pro server you set up.

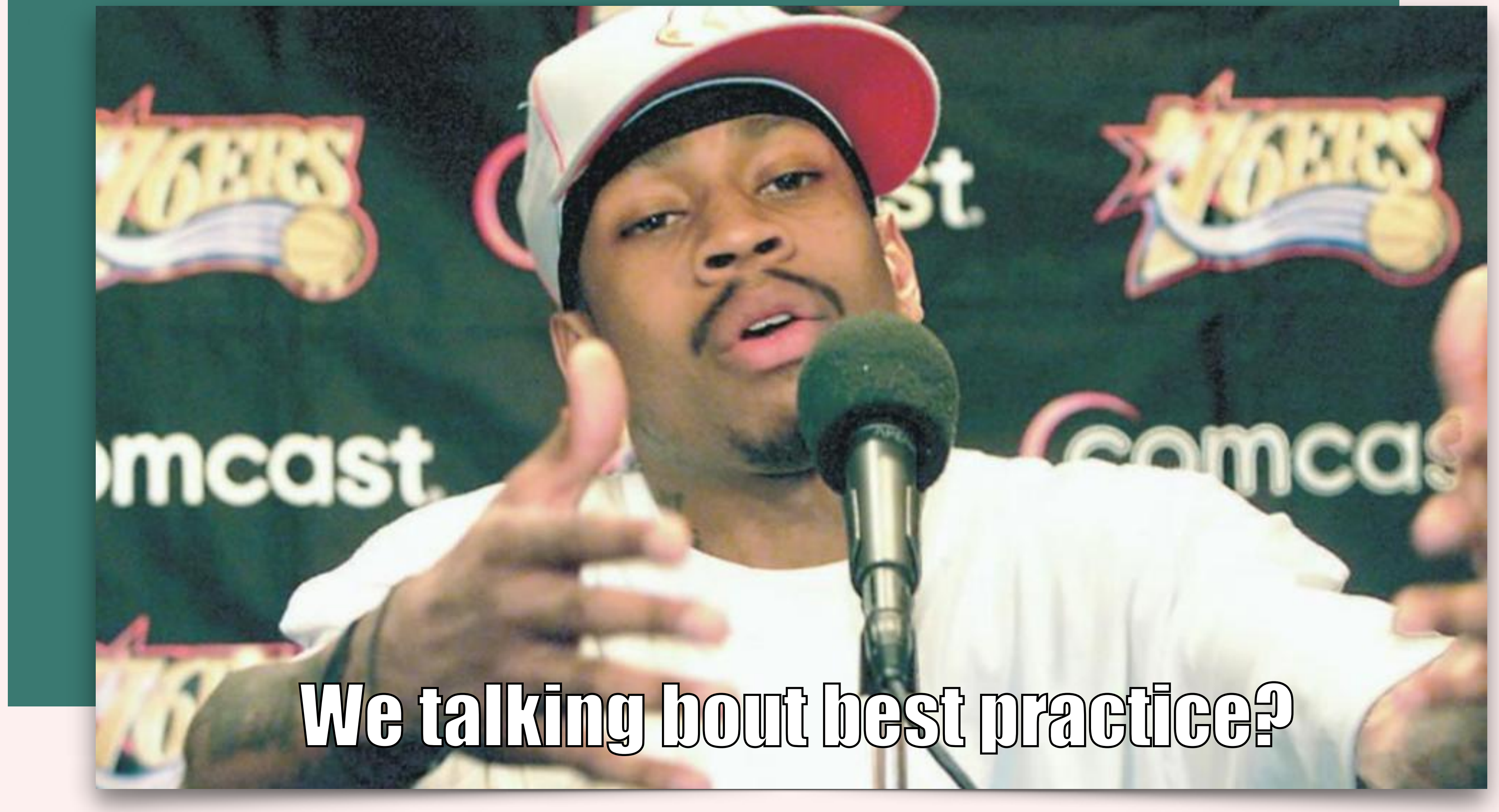
The template can include:

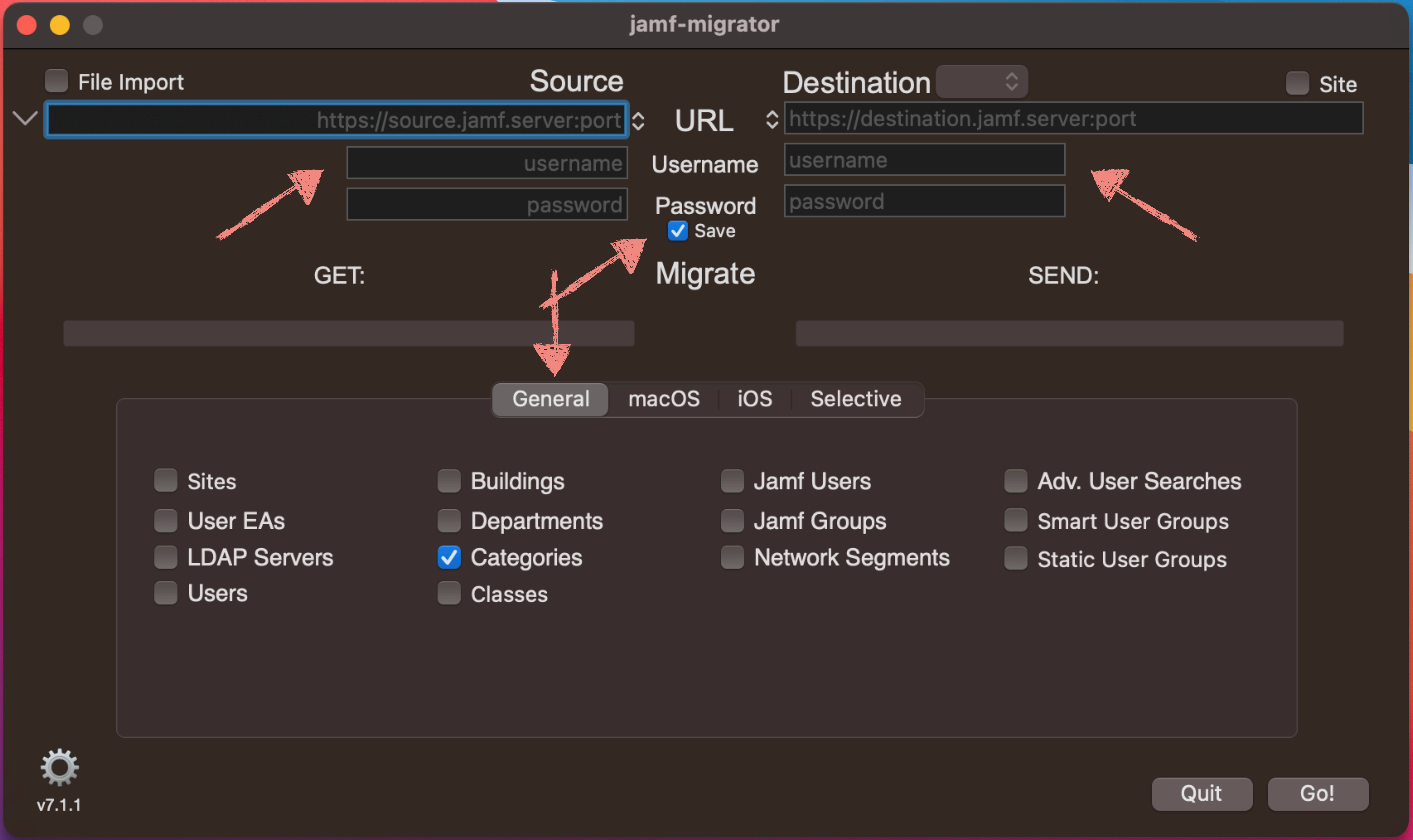
- Categories
- Extension Attributes
- Smart Computer Groups
- Scripts
- Policies
- Configuration Profiles

… and more

Template Best Practices

- The server should only contain generic objects that are safe to be used in another Jamf Pro server
- Everything should have a category, and categories should be as generic as possible
- Use a naming convention for Smart Groups and policies
- Don’t assume everything can be migrated, see README for limitations
- Leave out objects that can’t be migrated





jamf-migrator

□ File Import

Source | URL | Destination | □ Site

https://source.jamf.server:port | https://destination.jamf.server:port

Username: username | username

Password: password | password

☑ Save

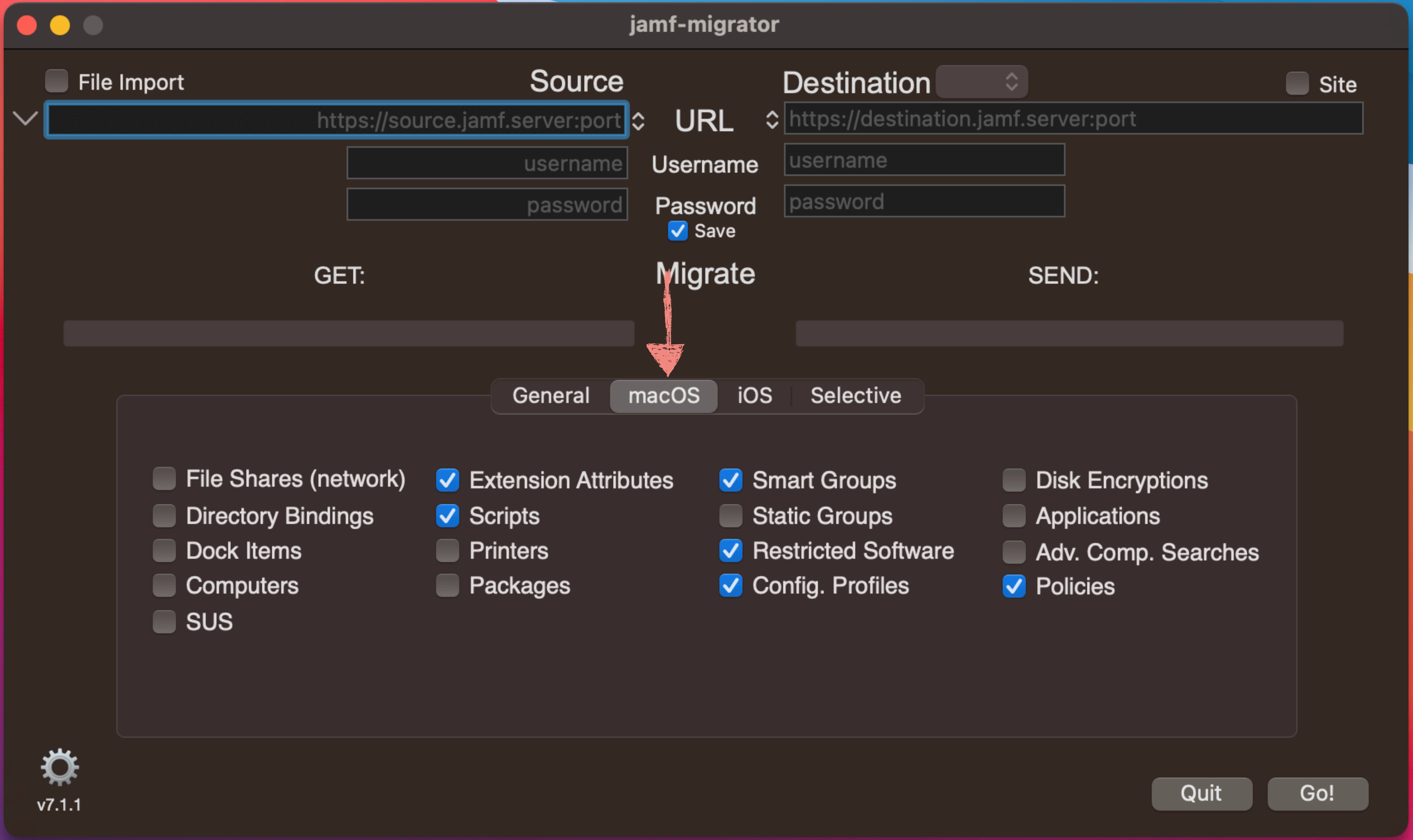
GET: | Migrate | SEND:

General | macOS | iOS | Selective

□ Sites
□ User EAs
□ LDAP Servers
□ Users
□ Buildings
□ Departments
☑ Categories
□ Classes
□ Jamf Users
□ Jamf Groups
□ Network Segments
□ Adv. User Searches
□ Smart User Groups
□ Static User Groups

v7.1.1

Quit | Go!



jamf-migrator

□ File Import

Source | URL | Destination

https://source.jamf.server:port | https://destination.jamf.server:port

username | Username | username

password | Password | password

☑ Save

□ Site

GET: Migrate SEND:

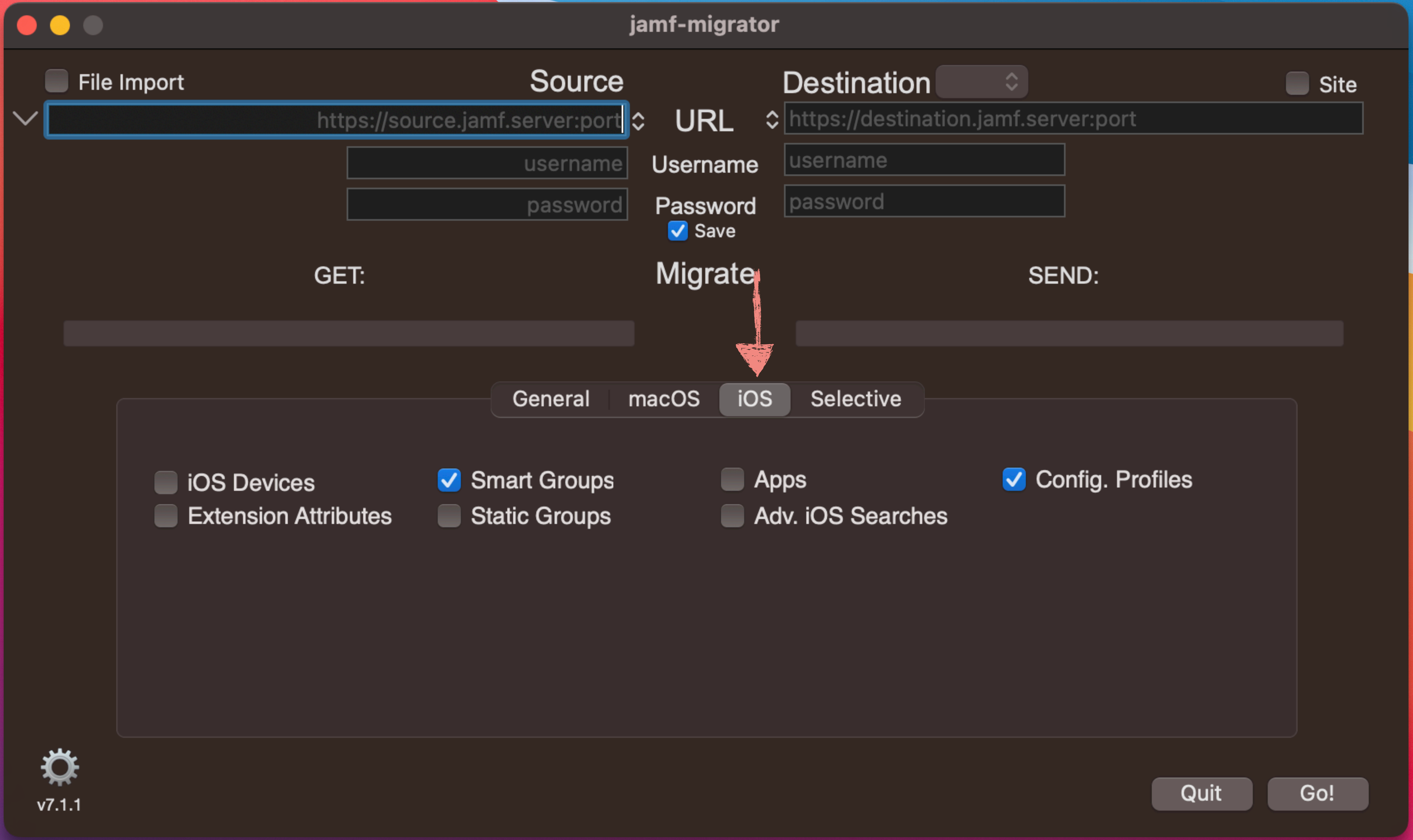
General | macOS | iOS | Selective

□ File Shares (network)
□ Directory Bindings
□ Dock Items
□ Computers
□ SUS

☑ Extension Attributes
☑ Scripts
□ Printers
□ Packages

☑ Smart Groups
□ Static Groups
☑ Restricted Software
☑ Config. Profiles

□ Disk Encryptions
□ Applications
□ Adv. Comp. Searches
☑ Policies



jamf-migrator

□ File Import

Source

URL: https://source.jamf.server:port

Username: username

Password: password

☑ Save

Destination

□ Site

URL: https://destination.jamf.server:port

Username: username

Password: password

□ iOS Devices

□ Extension Attributes

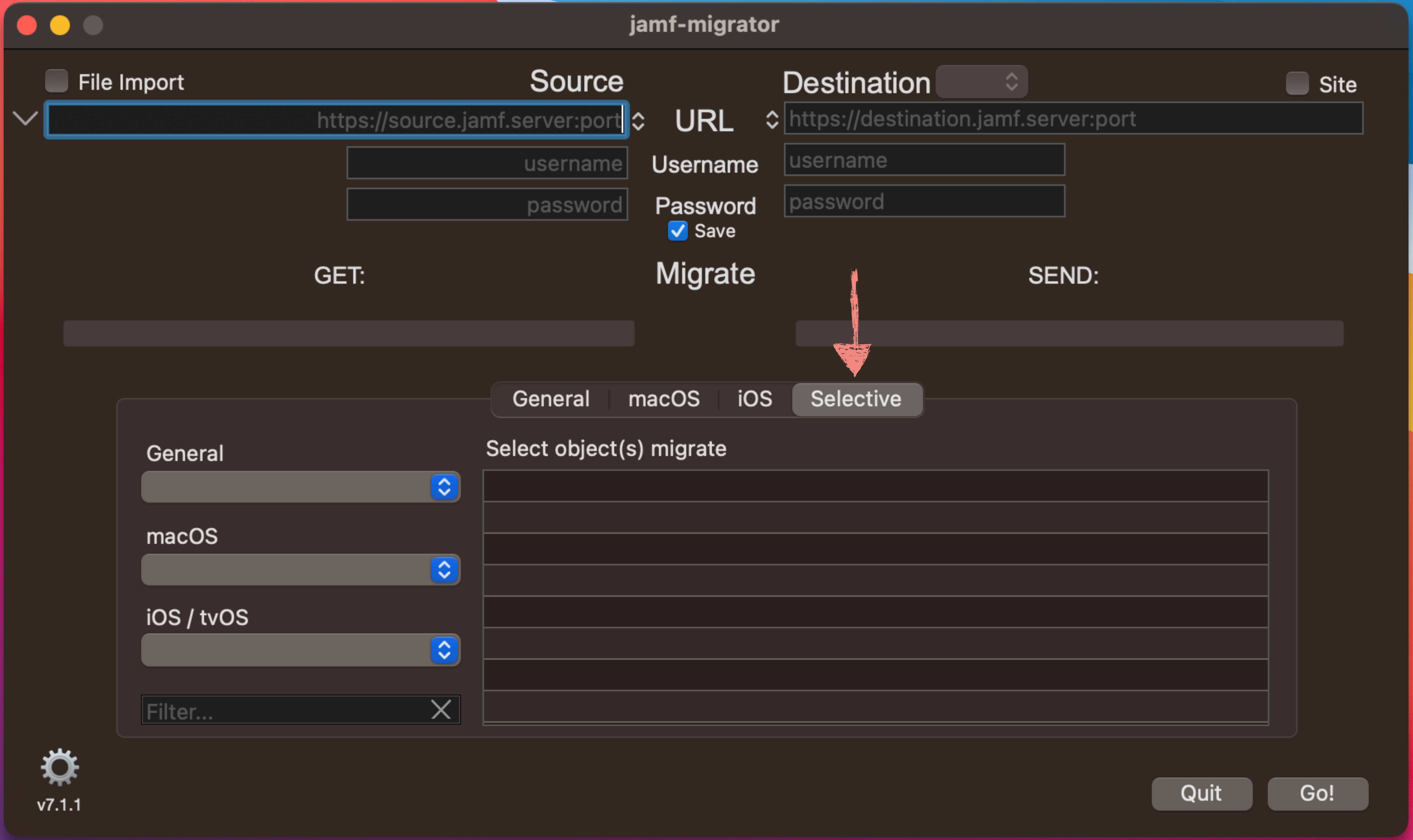
☑ Smart Groups

□ Static Groups

□ Apps

□ Adv. iOS Searches

☑ Config. Profiles

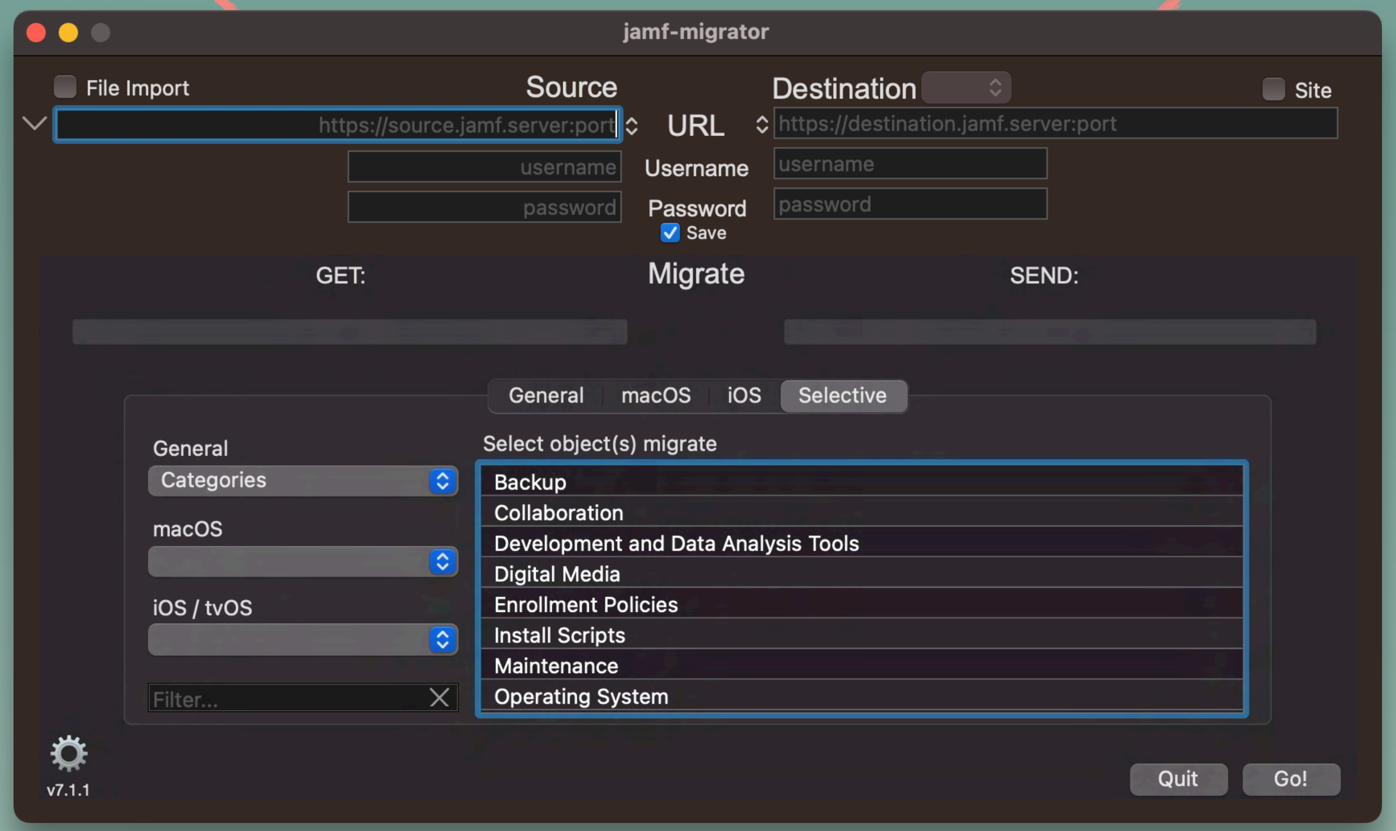

jamf-migrator
□ File Import
Source
Destination
□ Site
https://source.jamf.server:port
URL
https://destination.jamf.server:port
username
Username
username
password
Password
password
☑ Save
GET:
Migrate
SEND:
General
macOS
iOS
Selective
General
macOS
iOS / tvOS
Filter...
Select object(s) migrate
v7.1.1
Quit
Go!

jamf | PRO

Template

jamf | PRO

New



jamf-migrator

☐ File Import

Source		Destination
https://source.jamf.server:port	URL	https://destination.jamf.server:port
username	Username	username
password	Password ☑ Save	password

☐ Site

GET: Migrate SEND:

General | macOS | iOS | **Selective**

General: Categories

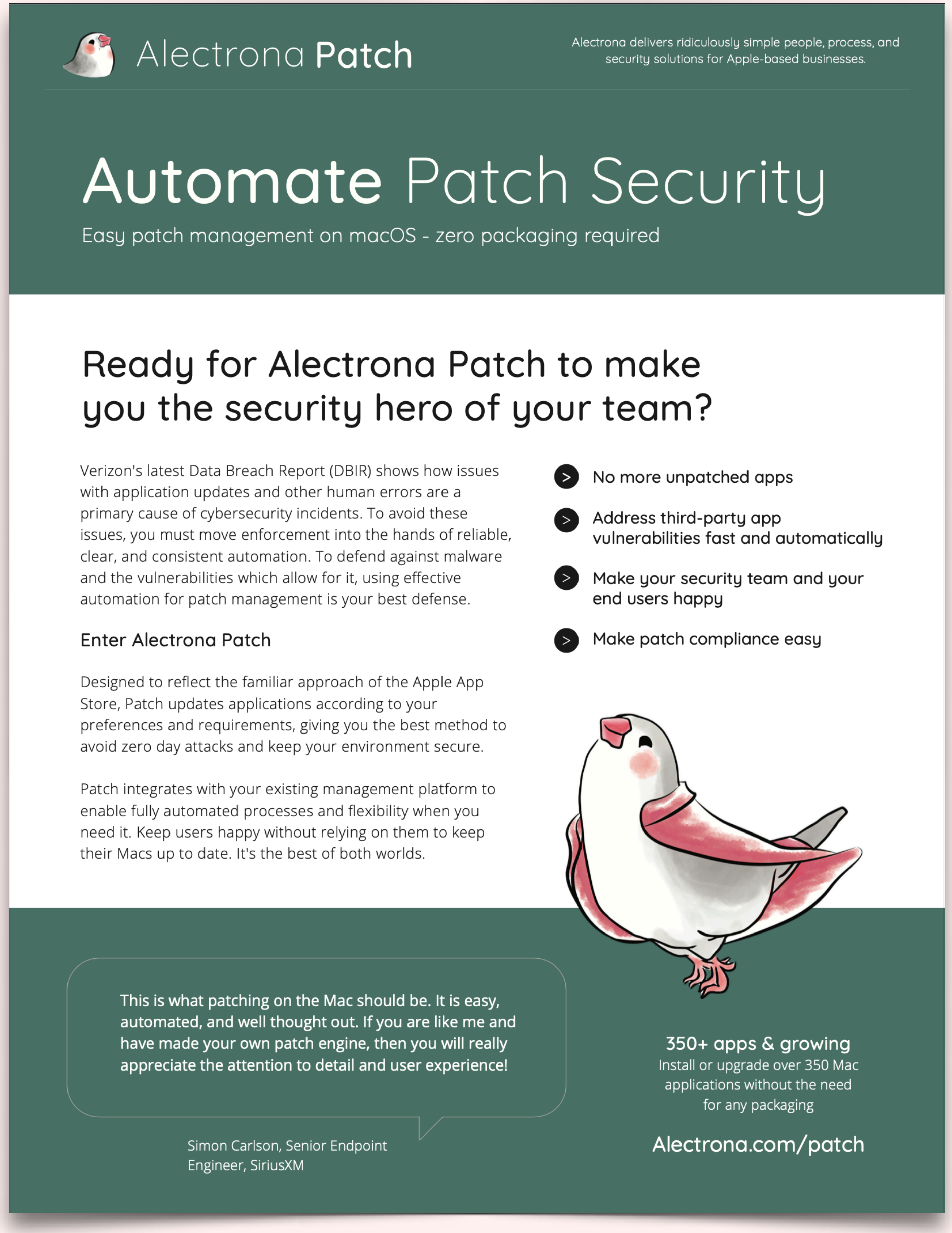
macOS:

iOS / tvOS:

Select object(s) migrate

- Backup
- Collaboration
- Development and Data Analysis Tools
- Digital Media
- Enrollment Policies
- Install Scripts
- Maintenance
- Operating System

Jamf Migrator



Alectrona **Patch**

Alectrona delivers ridiculously simple people, process, and security solutions for Apple-based businesses.

Automate Patch Security

Easy patch management on macOS - zero packaging required

Ready for Alectrona Patch to make you the security hero of your team?

Verizon's latest Data Breach Report (DBIR) shows how issues with application updates and other human errors are a primary cause of cybersecurity incidents. To avoid these issues, you must move enforcement into the hands of reliable, clear, and consistent automation. To defend against malware and the vulnerabilities which allow for it, using effective automation for patch management is your best defense.

Enter Alectrona Patch

Designed to reflect the familiar approach of the Apple App Store, Patch updates applications according to your preferences and requirements, giving you the best method to avoid zero day attacks and keep your environment secure.

Patch integrates with your existing management platform to enable fully automated processes and flexibility when you need it. Keep users happy without relying on them to keep their Macs up to date. It's the best of both worlds.

- No more unpatched apps
- Address third-party app vulnerabilities fast and automatically
- Make your security team and your end users happy
- Make patch compliance easy

> This is what patching on the Mac should be. It is easy, automated, and well thought out. If you are like me and have made your own patch engine, then you will really appreciate the attention to detail and user experience!

Simon Carlson, Senior Endpoint Engineer, SiriusXM

350+ apps & growing

Install or upgrade over 350 Mac applications without the need for any packaging

Alectrona.com/patch

Just a quick note…

Packages?

Why don't we migrate packages with Jamf Migrator?

- Jamf Migrator only migrates package metadata.
- We don't use packages, we use **Alectrona Patch!**

With Alectrona Patch, we are able to:

- Configure patching in Jamf Pro servers in minutes.
- Set up both automatic and Self Service policies quickly.
- Eliminate packaging a bazillion software titles.
- We can be more efficient as a team managing a bunch of Jamf Pro servers.

Topic Review

Jamf Pro Server Templates

- Allows you to easily build-out the standardized objects in a new Jamf Pro server
- Promotes consistency and organization across your Jamf Pro server fleet
- Reduces the chance of human error
- Steps can be written out into a process that can be followed, so that junior admins can perform the work
- Like, a billion times faster than building the server out manually 🤣

Problem: Jamf Pro is Not Designed to Track Changes in Scripts

Problem: Jamf Pro is Not Designed to Track Changes in Scripts

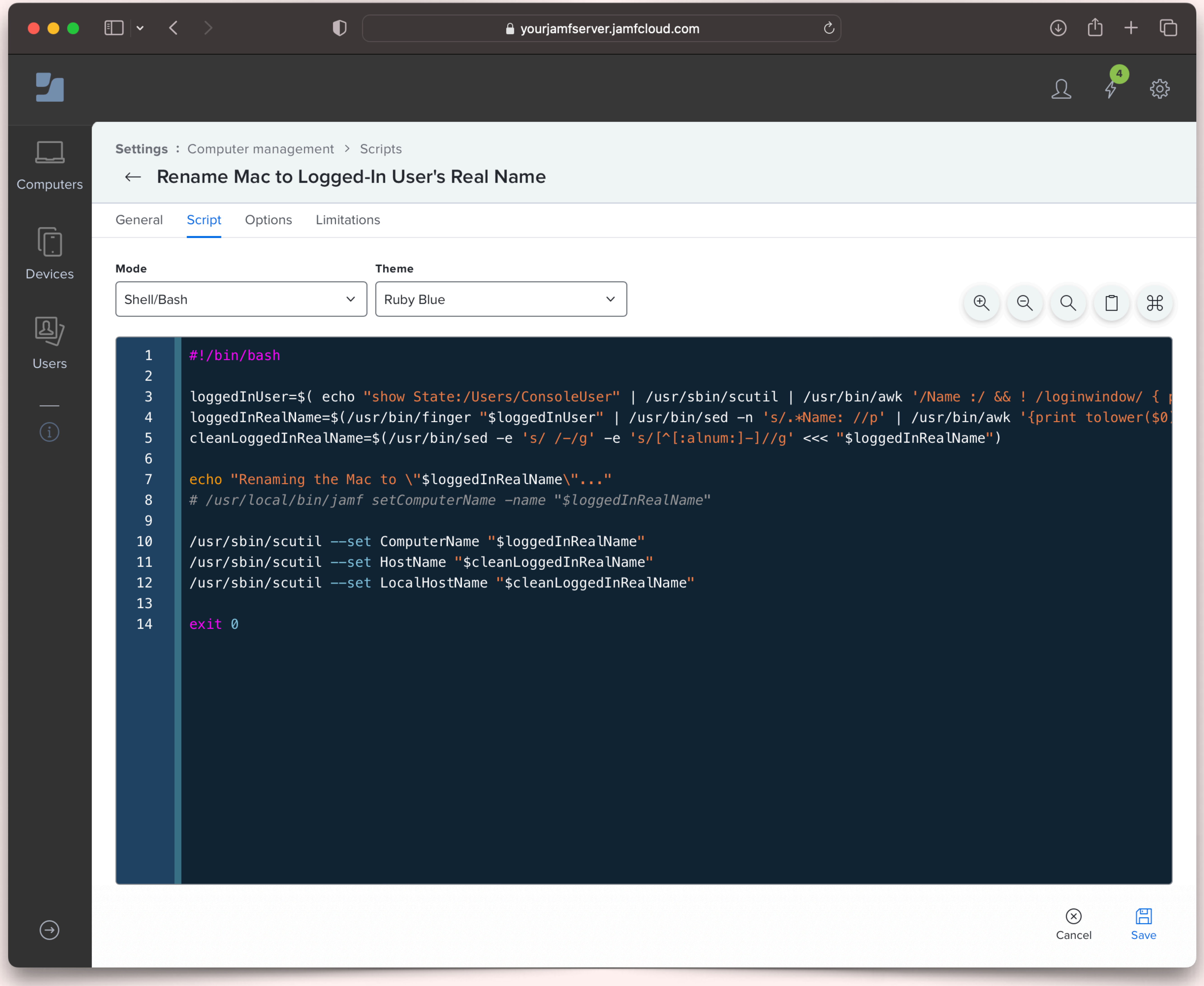
Scenario 1

So, you've made an update to a script directly in Jamf Pro and now the script isn't working right. You want to revert back to an older version, but you don't have a copy of the old script.

Scenario 2

Your team manages 10, 20, 50 🤯 Jamf Pro servers and you want to update a script in every server. If the script doesn't exist on a server, you need to create it.

How did we get here? 🙀



Settings : Computer management > Scripts

← Rename Mac to Logged-In User's Real Name

Mode: Shell/Bash

Theme: Ruby Blue

```bash
#!/bin/bash

loggedInUser=$( echo "show State:/Users/ConsoleUser" | /usr/sbin/scutil | /usr/bin/awk '/Name :/ && ! /loginwindow/ {
loggedInRealName=$(/usr/bin/finger "$loggedInUser" | /usr/bin/sed -n 's/.*Name: //p' | /usr/bin/awk '{print tolower($0
cleanLoggedInRealName=$(/usr/bin/sed -e 's/ /-/g' -e 's/[^[:alnum:]-]//g' <<< "$loggedInRealName")

echo "Renaming the Mac to \"$loggedInRealName\"..."
# /usr/local/bin/jamf setComputerName -name "$loggedInRealName"

/usr/sbin/scutil --set ComputerName "$loggedInRealName"
/usr/sbin/scutil --set HostName "$cleanLoggedInRealName"
/usr/sbin/scutil --set LocalHostName "$cleanLoggedInRealName"

exit 0
```

We'll do it live!

Jamf Pro's script editor is great but it's not designed to effectively track or manage changes to code.

You are out of luck if you want to:

- Revert to an earlier version of a script.*
- Understand why a change was made.
- Know who approved the change.
- **Make the change in multiple Jamf Pros.**

We need to integrate with source control!

Source Control

Source control (or version control) is the practice of tracking and managing changes to code.

- Every change to the code is tracked
- See the entire history of changes
- Roll back to an earlier version of code
- **Serves as the source of truth**

GitHub

ATLASSIAN Bitbucket

Visual Studio Team Foundation Server

GitLab

Source: Amazon, "What is Source Control?", https://aws.amazon.com/devops/source-control/

git4jamfpro brings source control and Jamf Pro together 💝

Replaces git2jss

A great (but aging) python library written by Adam Furbee

No Python Dependency

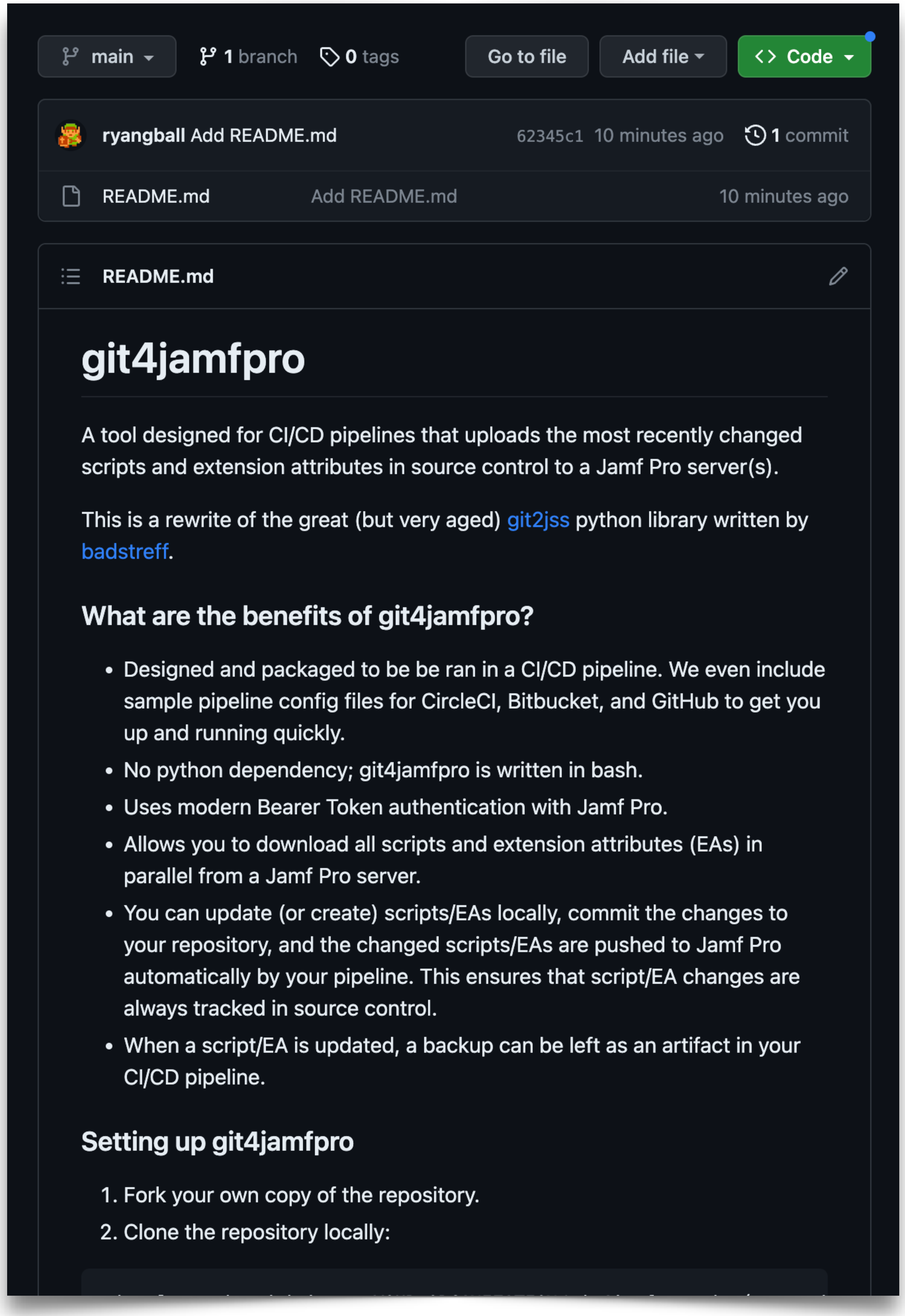
git4jamfpro is written in BASH

Perfect for CI/CD

Designed and packaged to be easily deployed in a CI/CD pipeline with fewer dependencies.

Modern Authentication to Jamf Pro

git4jamfpro uses Bearer Token authentication.



ryangball Add README.md 62345c1 10 minutes ago 1 commit

README.md Add README.md 10 minutes ago

README.md

git4jamfpro

A tool designed for CI/CD pipelines that uploads the most recently changed scripts and extension attributes in source control to a Jamf Pro server(s).

This is a rewrite of the great (but very aged) git2jss python library written by badstreff.

What are the benefits of git4jamfpro?

- Designed and packaged to be be ran in a CI/CD pipeline. We even include sample pipeline config files for CircleCI, Bitbucket, and GitHub to get you up and running quickly.
- No python dependency; git4jamfpro is written in bash.
- Uses modern Bearer Token authentication with Jamf Pro.
- Allows you to download all scripts and extension attributes (EAs) in parallel from a Jamf Pro server.
- You can update (or create) scripts/EAs locally, commit the changes to your repository, and the changed scripts/EAs are pushed to Jamf Pro automatically by your pipeline. This ensures that script/EA changes are always tracked in source control.
- When a script/EA is updated, a backup can be left as an artifact in your CI/CD pipeline.

Setting up git4jamfpro

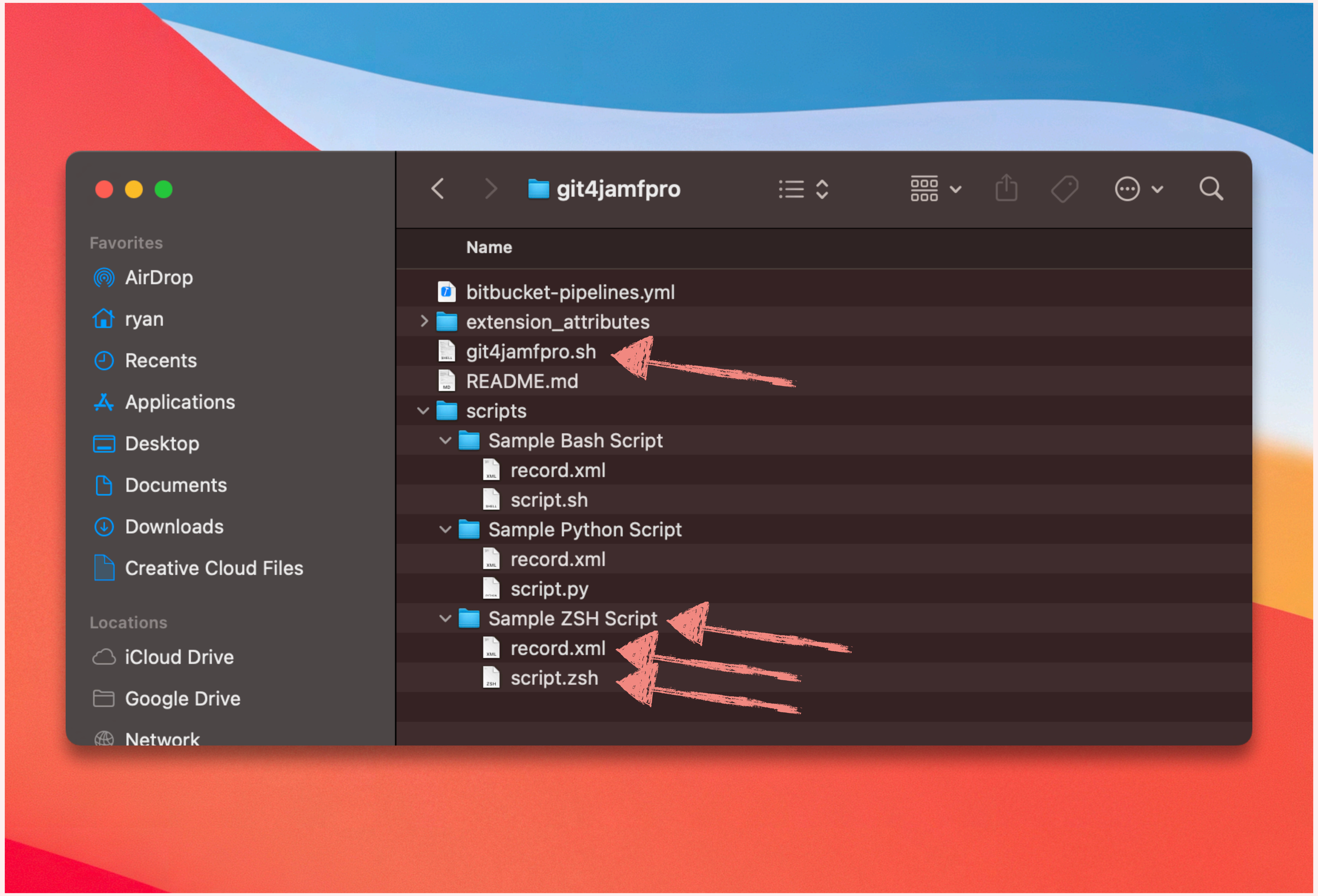
1. Fork your own copy of the repository.
2. Clone the repository locally:

Repository Contents

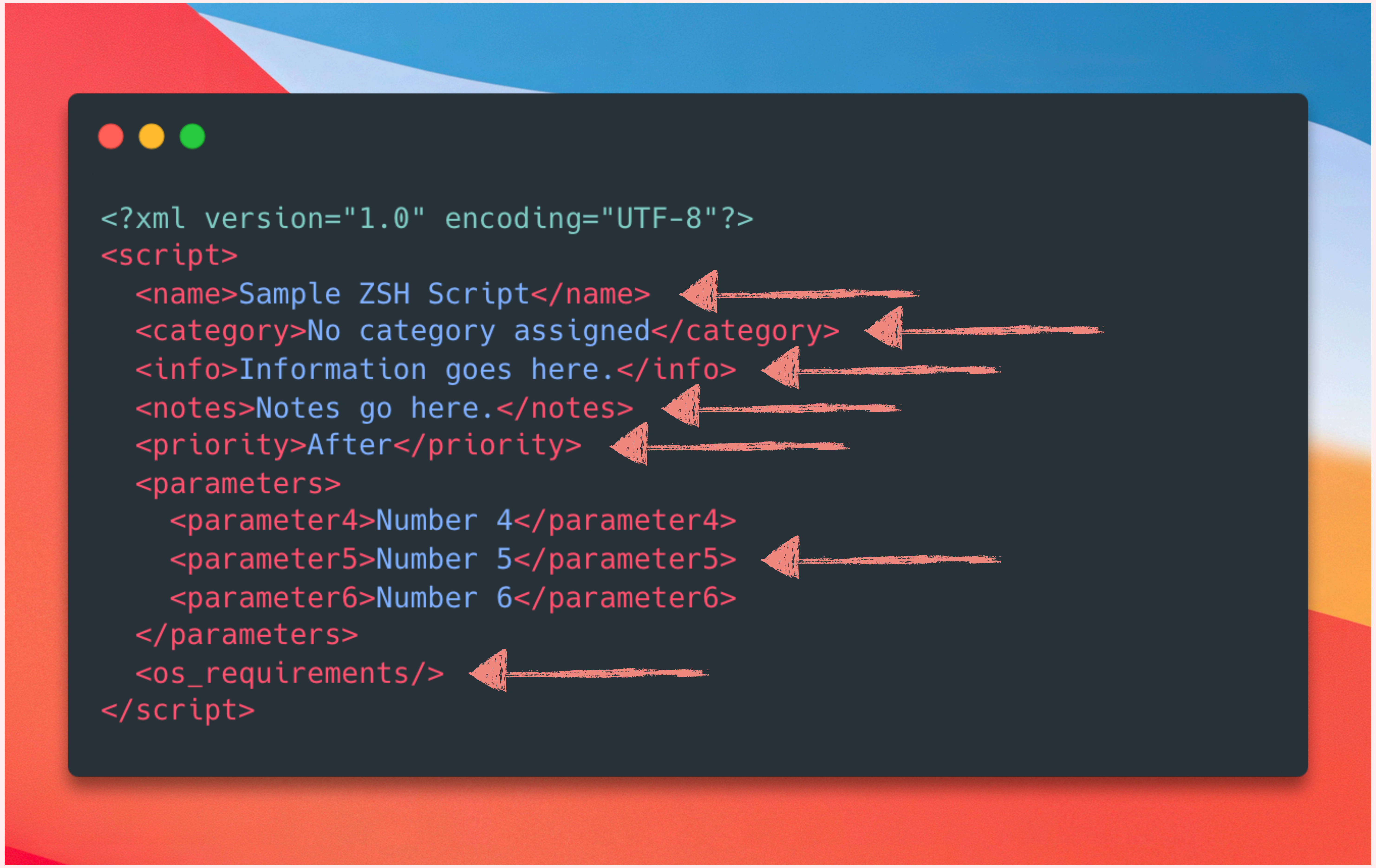
Other than the git4jamfpro.sh script, there are a few sample scripts and EAs that you can use for testing in both the root “scripts” and “extension_attributes” folders.

These folders are also where your downloaded scripts/EAs are placed. For each script or EA you have:

- A subfolder that matches the script name
- The script file itself
- A record.xml file containing the xml record data



```
bitbucket-pipelines.yml
extension_attributes
git4jamfpro.sh
README.md
scripts
  Sample Bash Script
    record.xml
    script.sh
  Sample Python Script
    record.xml
    script.py
  Sample ZSH Script
    record.xml
    script.zsh
```



```
<?xml version="1.0" encoding="UTF-8"?>
<script>
  <name>Sample ZSH Script</name>
  <category>No category assigned</category>
  <info>Information goes here.</info>
  <notes>Notes go here.</notes>
  <priority>After</priority>
  <parameters>
    <parameter4>Number 4</parameter4>
    <parameter5>Number 5</parameter5>
    <parameter6>Number 6</parameter6>
  </parameters>
  <os_requirements/>
</script>
```

record.xml format

The record.xml file contains an xml representation of the script object from Jamf Pro including all the fields you can customize in the web app interface:

- Name
- Category
- Info
- Notes
- Priority
- Parameters
- OS Requirements 😂

Jamf Pro Script Update **Process**

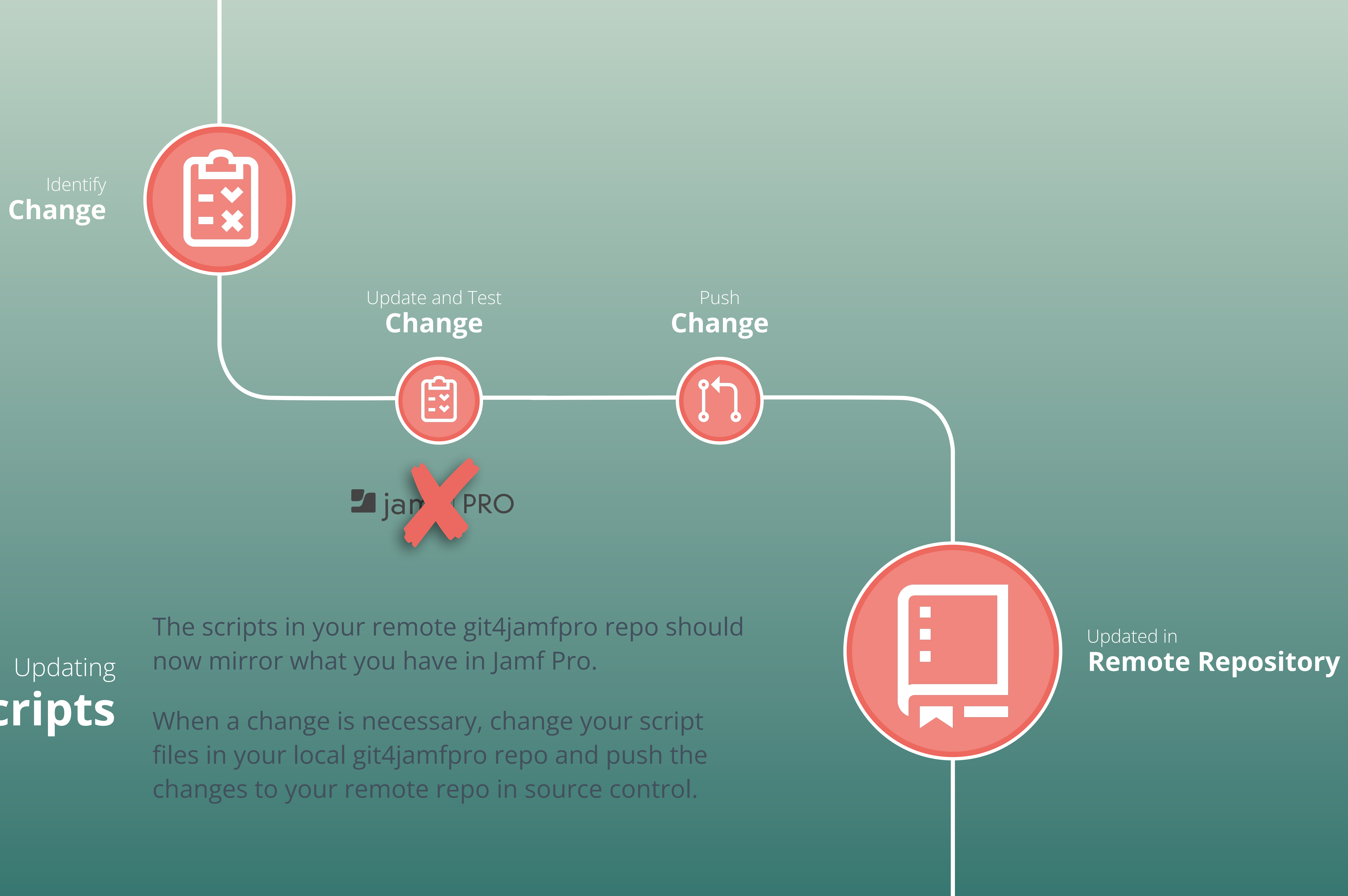
Using git4jamfpro!

Download scripts to your local git4jamfpro repo

```
./git4jamfpro.sh \
--url <SERVER_URL> \
--username <API_USER> \
--password <API_PASS> \
--download-scripts \
--download-eas
```

Commit to your remote git4jamfpro repo

```
git add
git commit -m "initial commit"
git push
```



Updating
Scripts

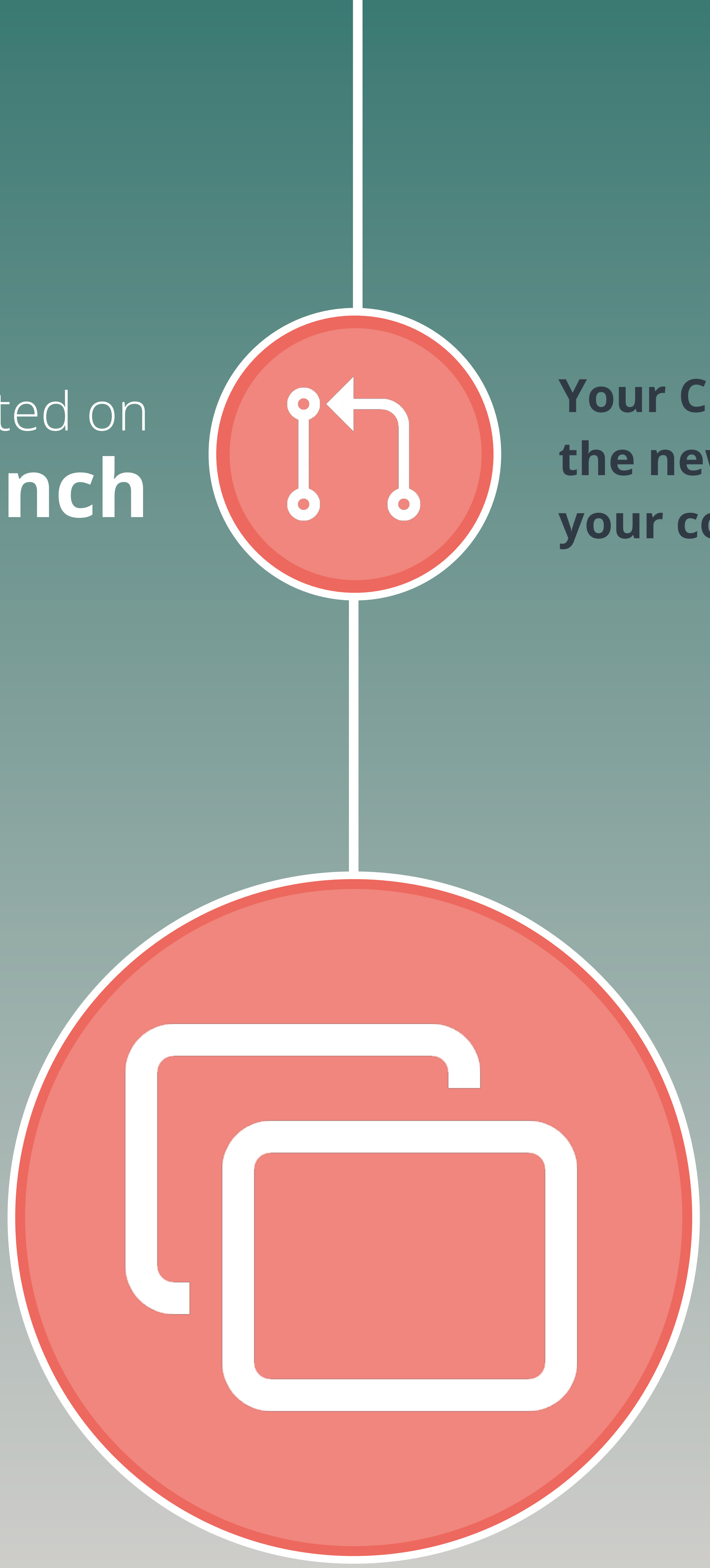
The scripts in your remote git4jamfpro repo should now mirror what you have in Jamf Pro.

When a change is necessary, change your script files in your local git4jamfpro repo and push the changes to your remote repo in source control.

The real magic takes place when a CI/CD Pipeline is configured!

You *can* run the entire process locally with Terminal, but its not ideal (or as rad). 😎

git4jamfpro works by detecting the scripts or extension attributes that changed in your repo **between your last two commits**, so leveraging source control is a **requirement**.



Commit detected on
Master Branch

Your CI/CD platform detects the new commit and runs your configured pipeline.

Pipeline
Starts

git4jamfpro is executed as a step in the pipeline.

Changed scripts are automatically updated in your Jamf Pro server(s)

Topic Review

git4jamfpro

- Brings source control and Jamf Pro together. 😍
- Allows for automating the update of Jamf Pro scripts and extension attributes across multiple Jamf Pro instances.
- Requires source control and determines the scripts and extension attributes to update based on changes between the last two commits.
- Allows for the concurrent download of scripts and extension attributes from a Jamf Pro server.
- Free, open-source, and made to be easy to set up in your CI/CD platform.

Problem: Missing Important Notifications in Jamf Pro Servers

Problem: Missing Important Notifications in Jamf Pro Servers

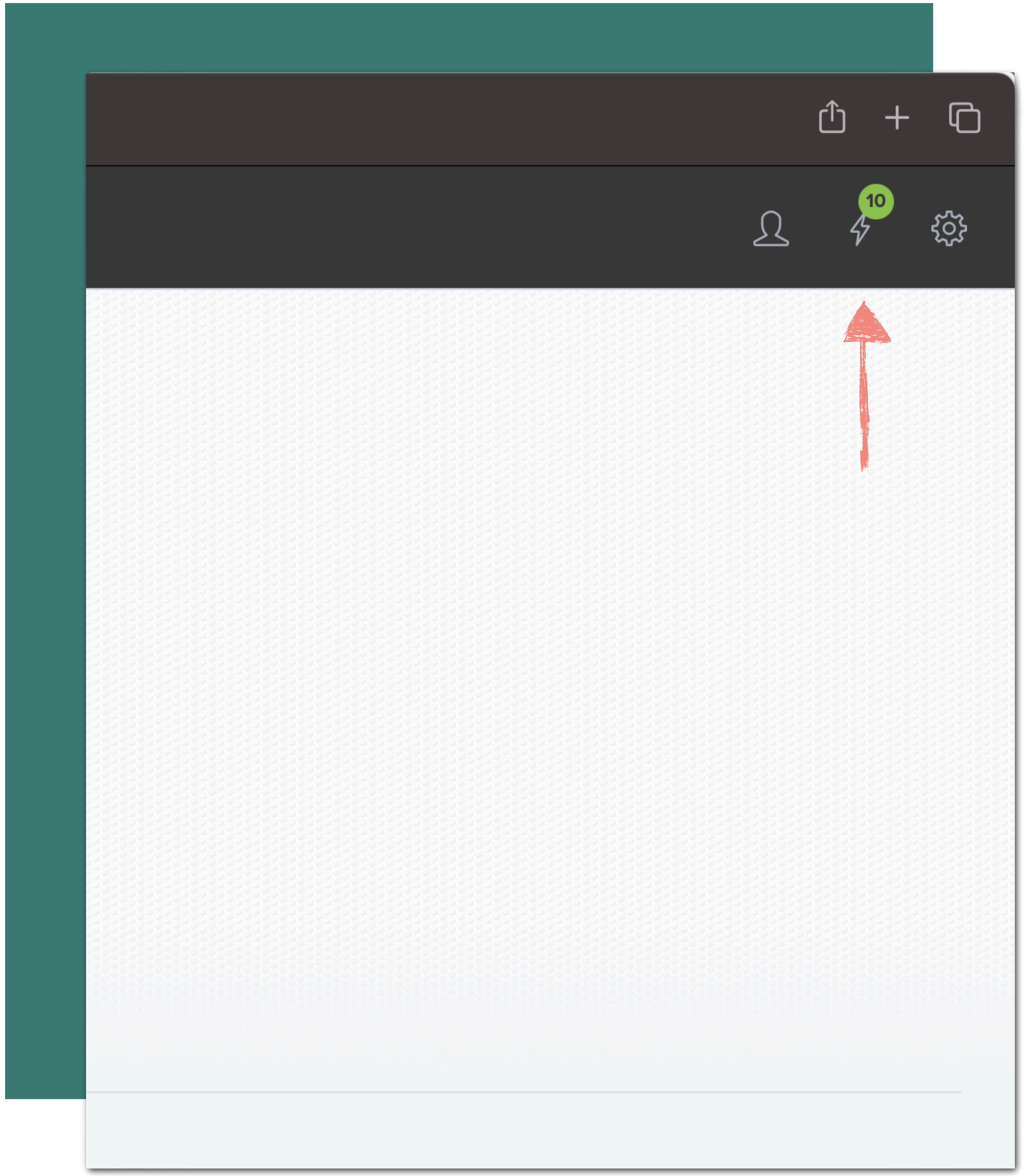
Have you ever let your Push Certificate expire because you didn't know when it needed to be renewed?

There are multitudes of notifications that can be shown in Jamf Pro's web app interface. Do you know how many there are?

55

Do you manage too many Jamf Pro servers to depend on logging into Jamf Pro's web app interface to see these notifications?

We will show you how you can get a Slack message to let you know when you need to attend to all of these notifications!



Jamf Pro Notifications

In the top-right of Jamf Pro's toolbar you'll find your Jamf Pro notifications.

When you click this icon you can see your notifications and take some action if necessary.

But who wants to have to login to Jamf Pro just to see these... 👎

Jamf Pro Notifications Alerter sends your Jamf Pro notifications to Slack

> ***A tool designed for CI/CD pipelines that gets all Jamf Pro Notifications from a Jamf Pro server and posts them to Slack using a webhook.***

A simple CLI tool

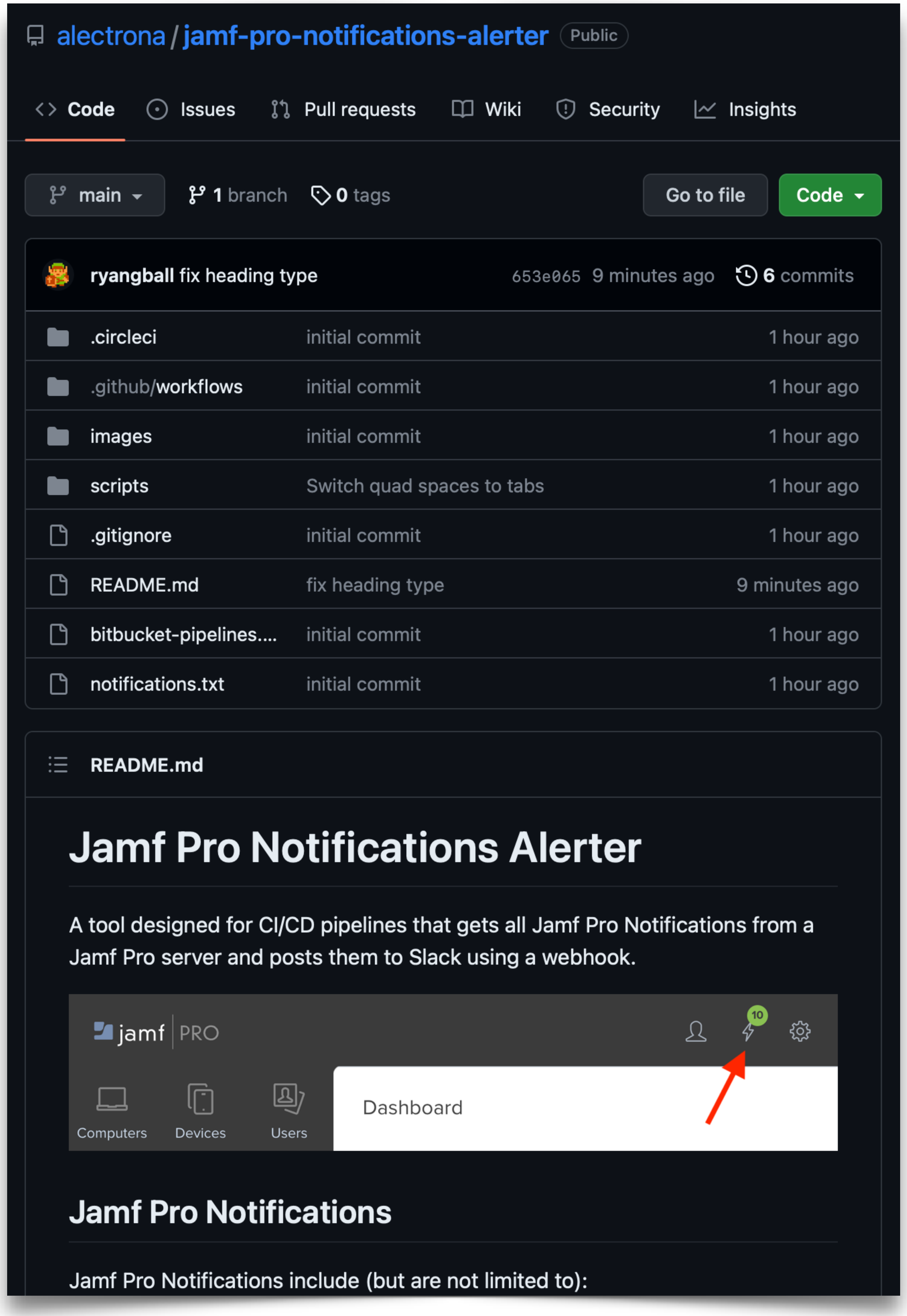
Written in BASH and a breeze to execute.

Run as Pipeline or locally

Designed for CI/CD pipelines but can be ran locally as well.

Make it yours

Allows you to easily customize which notifications to ignore.



ryangball fix heading type 653e065 9 minutes ago 6 commits

.circleci	initial commit	1 hour ago
.github/workflows	initial commit	1 hour ago
images	initial commit	1 hour ago
scripts	Switch quad spaces to tabs	1 hour ago
.gitignore	initial commit	1 hour ago
README.md	fix heading type	9 minutes ago
bitbucket-pipelines....	initial commit	1 hour ago
notifications.txt	initial commit	1 hour ago

README.md

Jamf Pro Notifications Alerter

A tool designed for CI/CD pipelines that gets all Jamf Pro Notifications from a Jamf Pro server and posts them to Slack using a webhook.

Jamf Pro Notifications

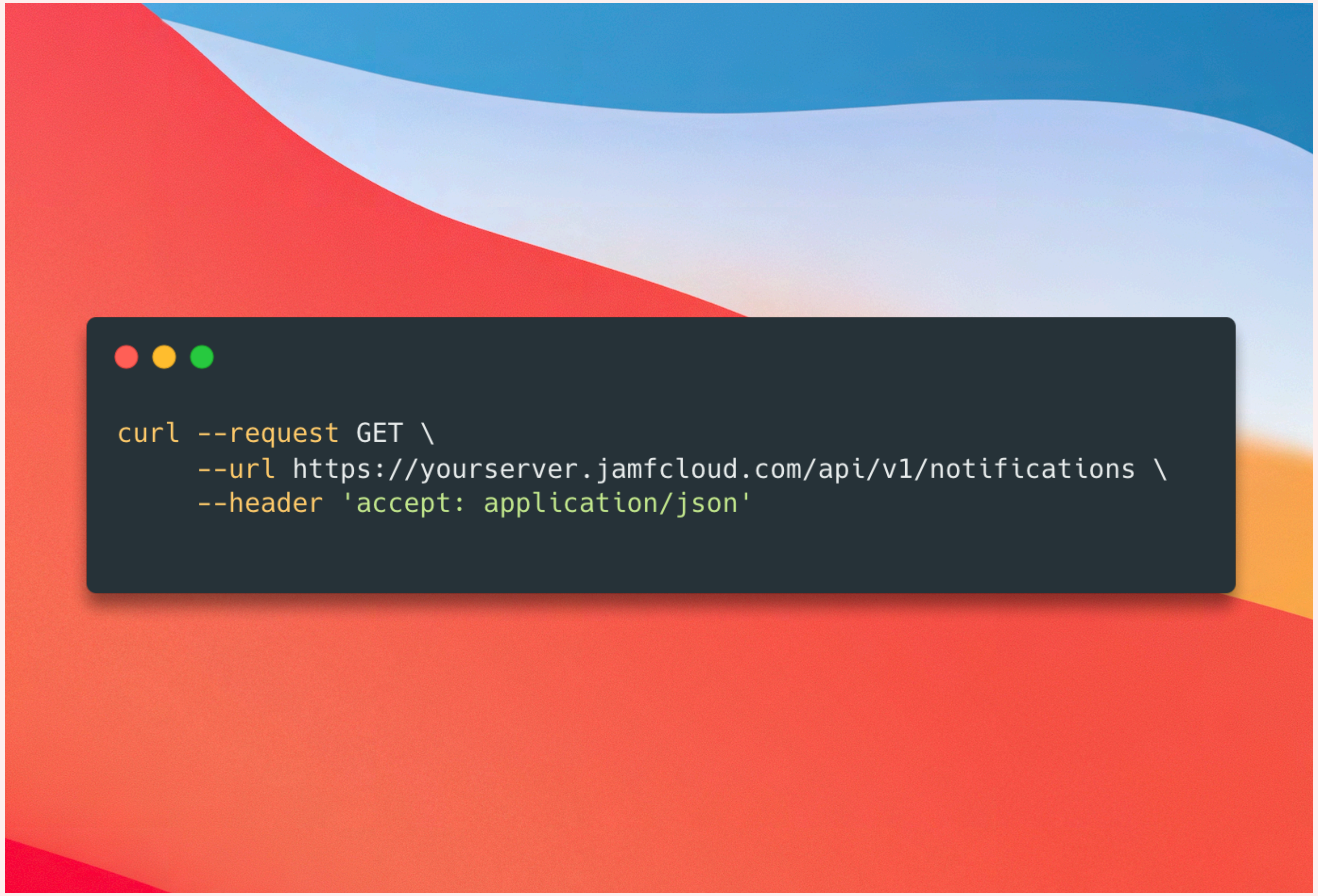
Jamf Pro Notifications include (but are not limited to):

Getting Notifications via API

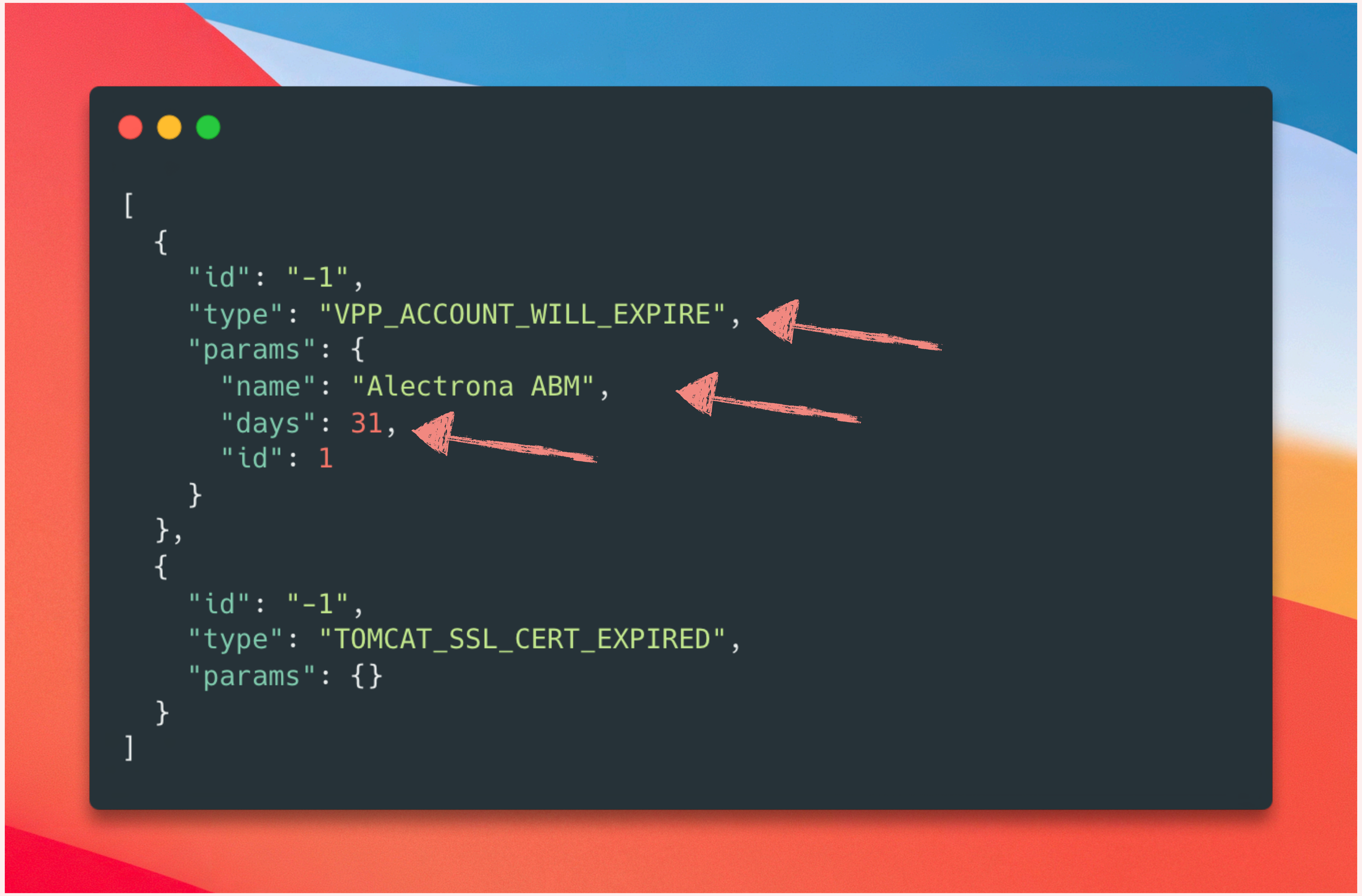
You can get Jamf Pro notifications via the API like the image to the right.

Some of the notifications are:

- PUSH_CERT_WILL_EXPIRE
- SSO_CERT_WILL_EXPIRE
- GSX_CERT_WILL_EXPIRE
- APPLE_SCHOOL_MANAGER_T_C_NOT_SIGNED
- VPP_TOKEN_REVOKED



```
curl --request GET \
     --url https://yourserver.jamfcloud.com/api/v1/notifications \
     --header 'accept: application/json'
```

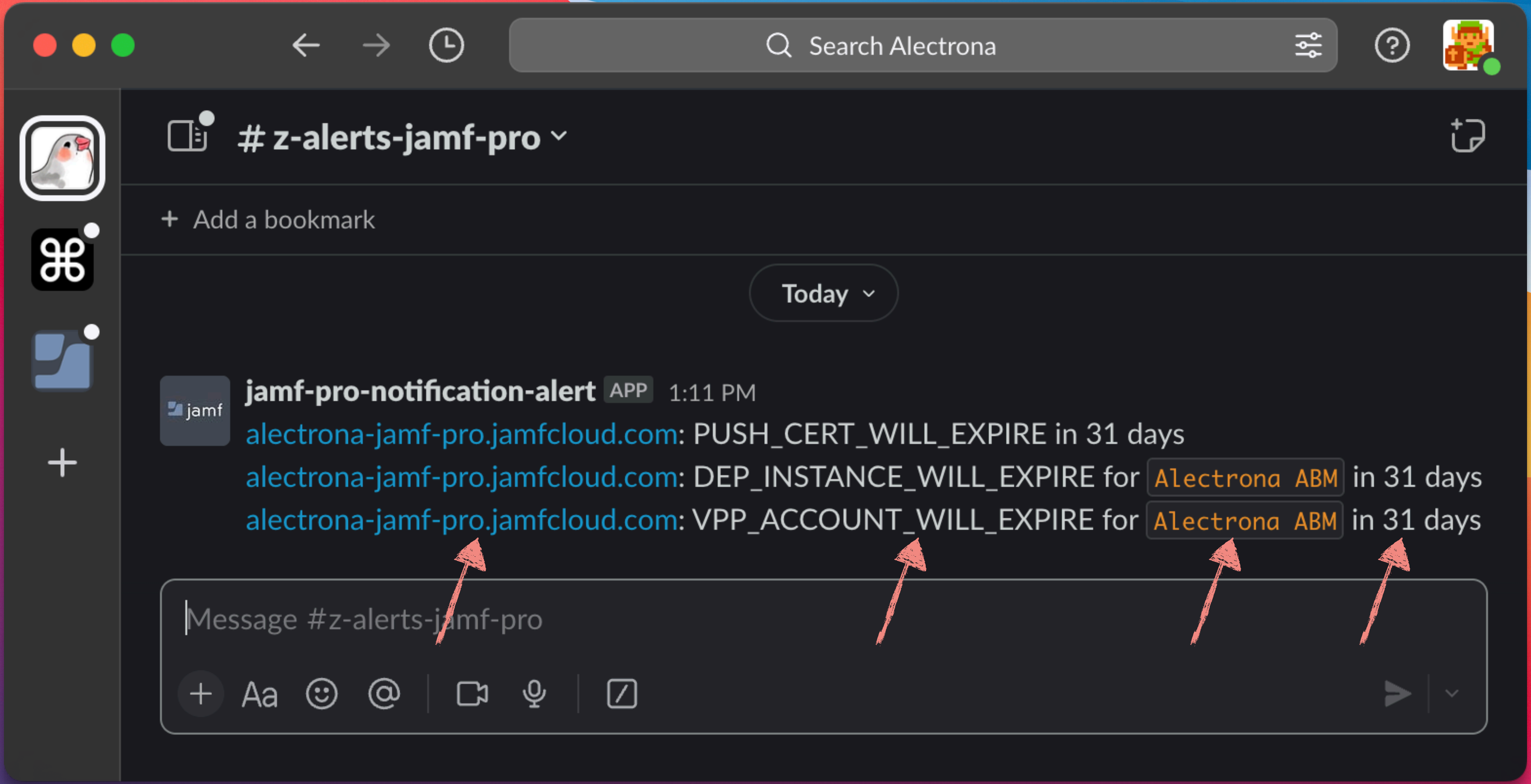


```
[
  {
    "id": "-1",
    "type": "VPP_ACCOUNT_WILL_EXPIRE",
    "params": {
      "name": "Alectrona ABM",
      "days": 31,
      "id": 1
    }
  },
  {
    "id": "-1",
    "type": "TOMCAT_SSL_CERT_EXPIRED",
    "params": {}
  }
]
```

The JSON response

The JSON response is an array of objects, each with:

- A notification type
- Optional parameters:
  - Name
  - Days until expiration



jamf-pro-notification-alert APP 1:11 PM

alectrona-jamf-pro.jamfcloud.com: PUSH_CERT_WILL_EXPIRE in 31 days

alectrona-jamf-pro.jamfcloud.com: DEP_INSTANCE_WILL_EXPIRE for `Alectrona ABM` in 31 days

alectrona-jamf-pro.jamfcloud.com: VPP_ACCOUNT_WILL_EXPIRE for `Alectrona ABM` in 31 days

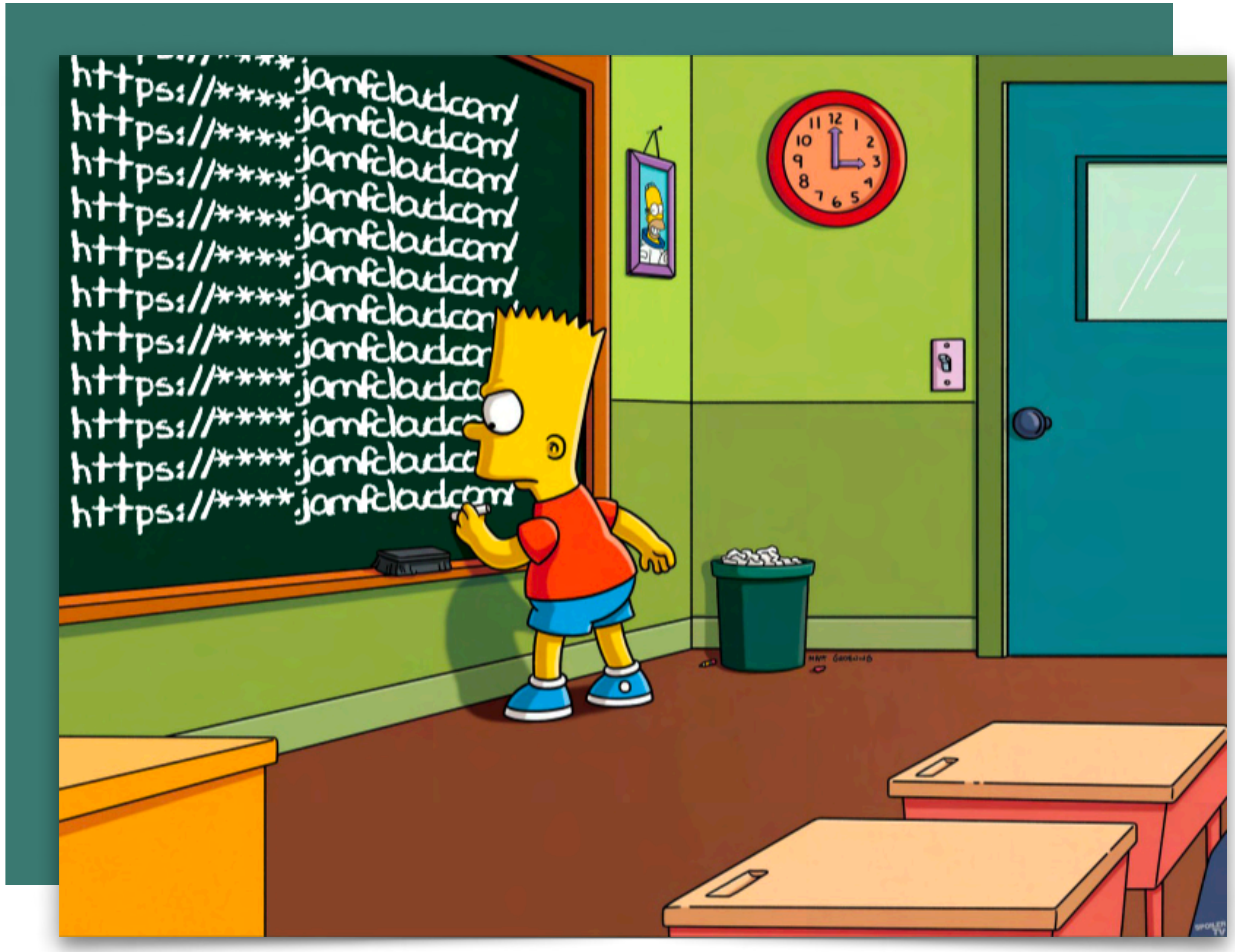
Topic Review

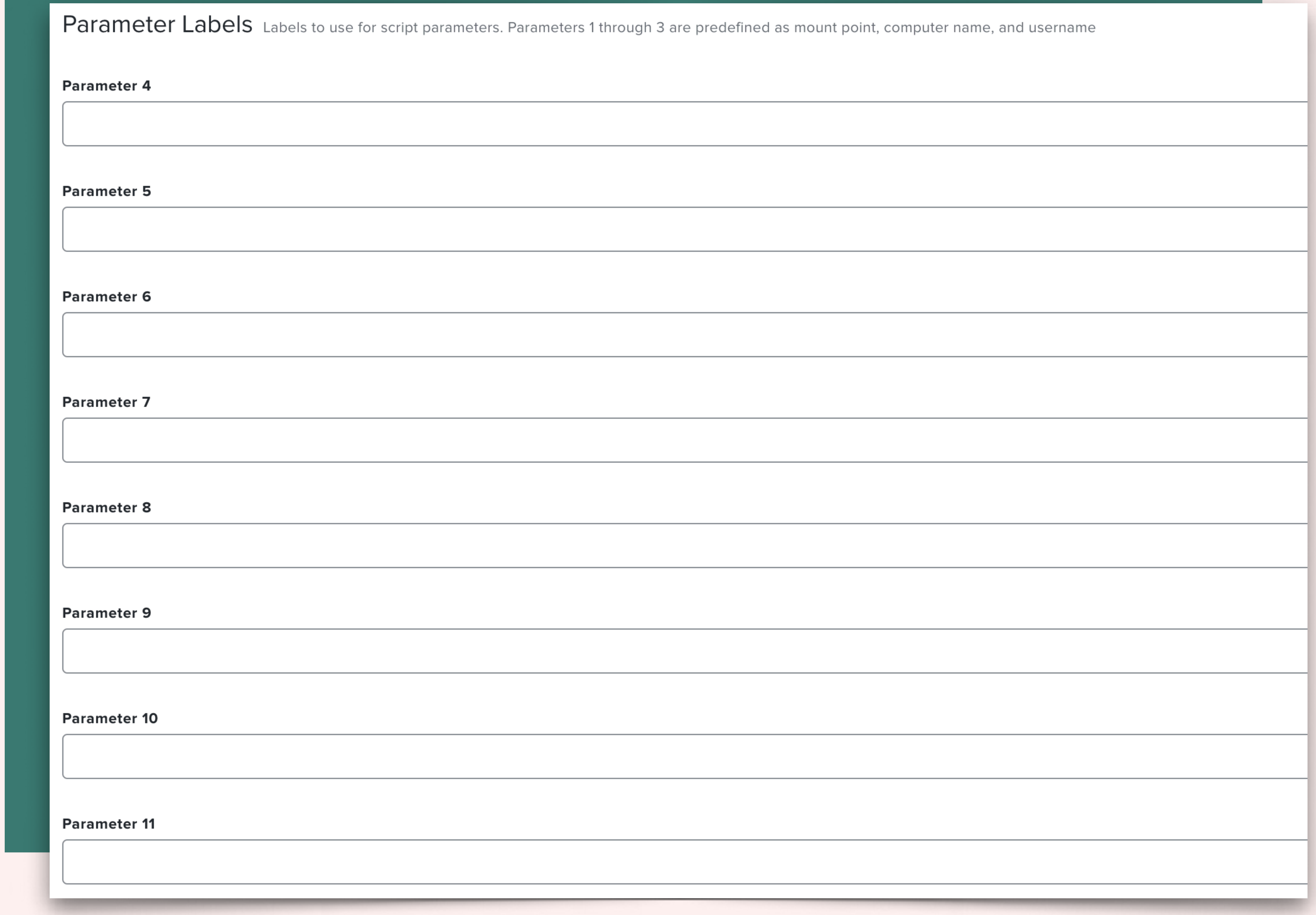
Jamf Pro Notifications Alerter

- Never miss another Jamf Pro cert or token expiration again.
- Post Jamf Pro Notifications in a Slack channel for each of your Jamf Pro servers.
- Slack message includes the Jamf Pro URL, the Jamf Pro Notification name, and how many days until the cert/token expires.
- Free, open-source, and made to be easy to set up in your CI/CD platform.

Problem: I don’t want to type the same thing so many times

Problem: I don’t want to type the same thing so many times


https://****.jamfcloud.com/
https://****.jamfcloud.com/
https://****.jamfcloud.com/
https://****.jamfcloud.com/
https://****.jamfcloud.com/
https://****.jamfcloud.com/
https://****.jamfcloud.con
https://****.jamfcloud.cor
https://****.jamfcloud.co
https://****.jamfcloudc
https://****.jamfcloudc
https://****.jamfcloud.com



Parameter Labels Labels to use for script parameters. Parameters 1 through 3 are predefined as mount point, computer name, and username

Parameter 4

Parameter 5

Parameter 6

Parameter 7

Parameter 8

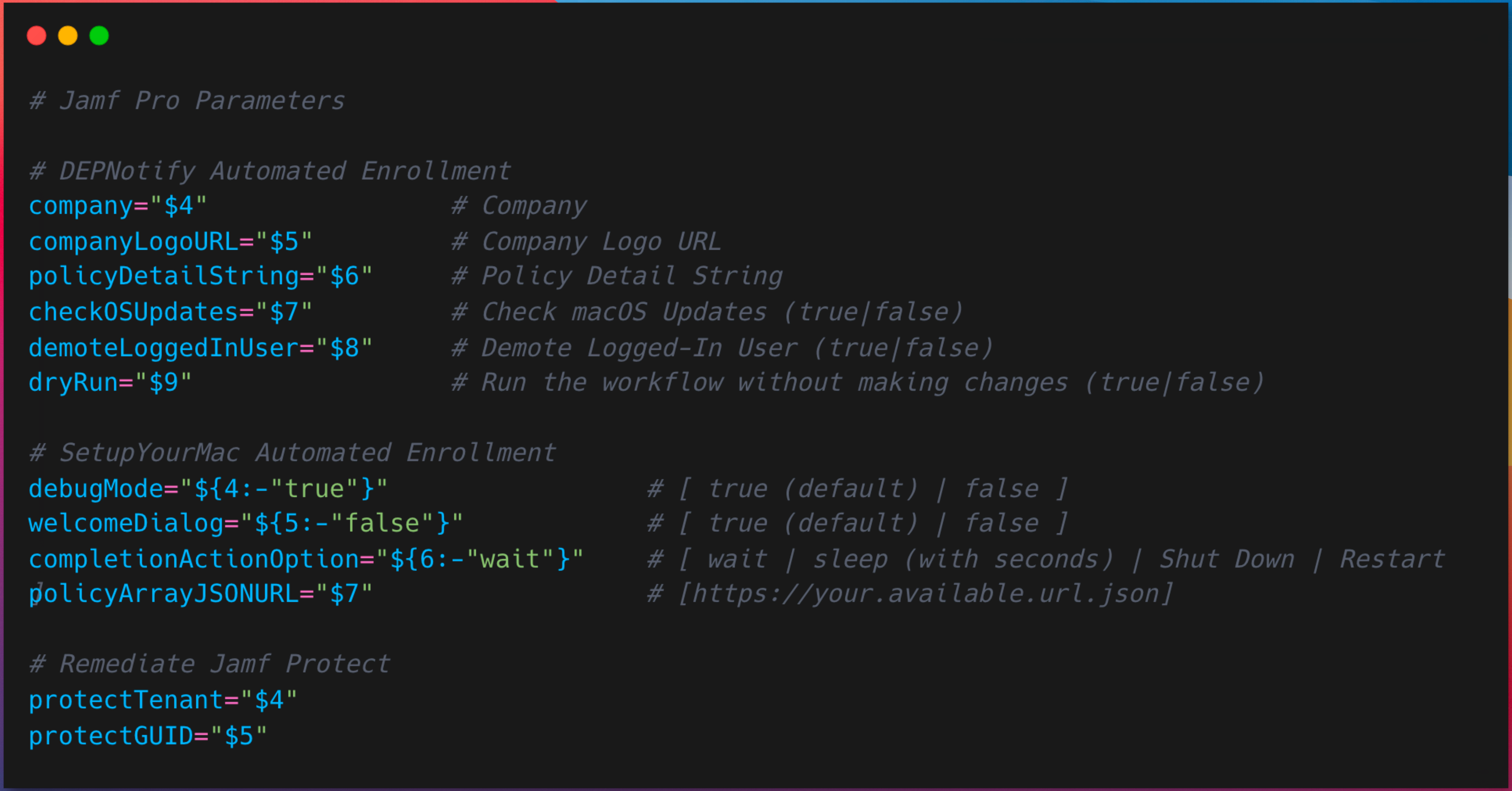
Parameter 9

Parameter 10

Parameter 11

Modular Scripts

Leverage Jamf Variables

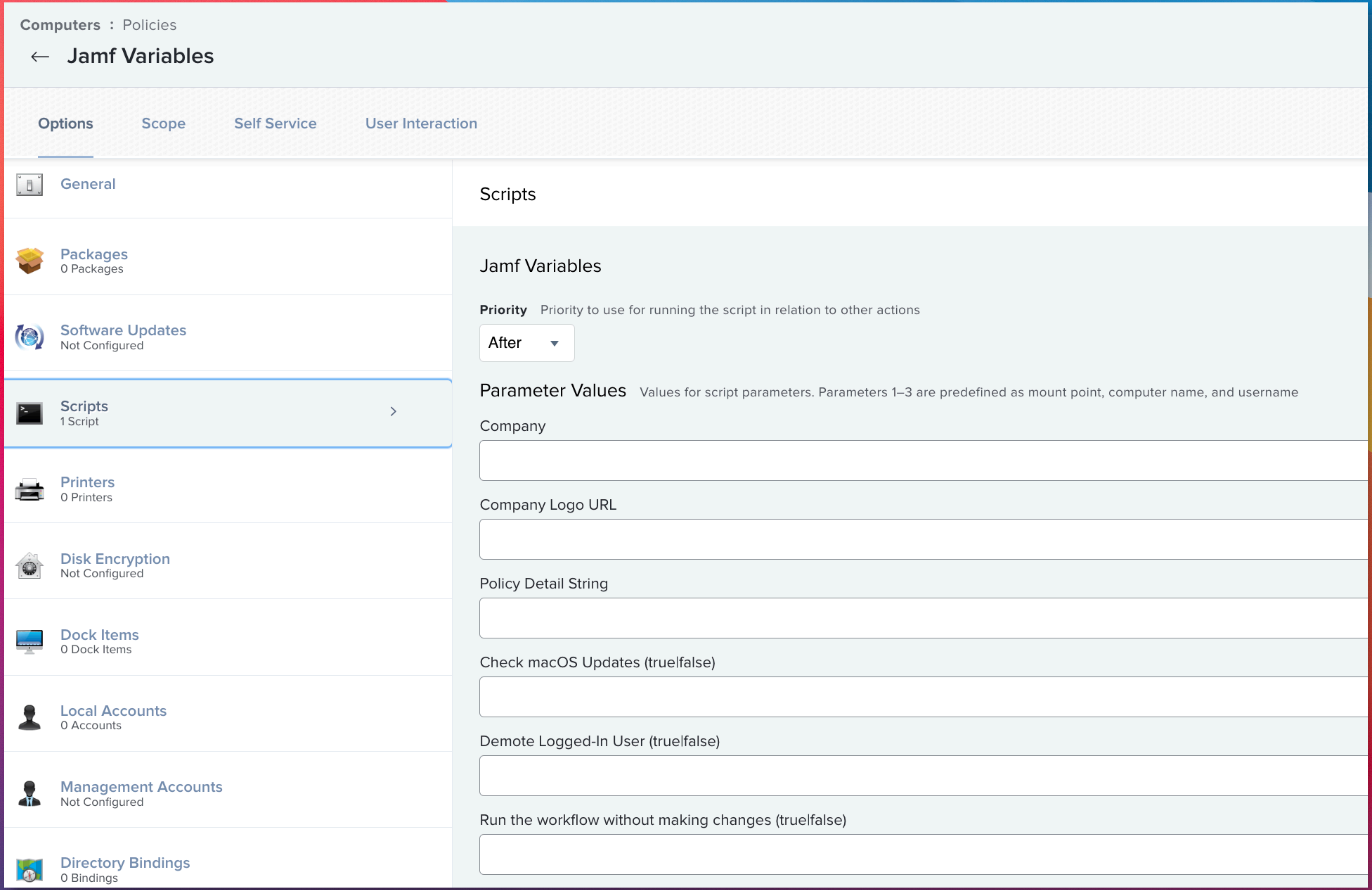


```
# Jamf Pro Parameters

# DEPNotify Automated Enrollment
company="$4"                 # Company
companyLogoURL="$5"          # Company Logo URL
policyDetailString="$6"      # Policy Detail String
checkOSUpdates="$7"          # Check macOS Updates (true|false)
demoteLoggedInUser="$8"      # Demote Logged-In User (true|false)
dryRun="$9"                  # Run the workflow without making changes (true|false)

# SetupYourMac Automated Enrollment
debugMode="${4:-"true"}"                  # [ true (default) | false ]
welcomeDialog="${5:-"false"}"             # [ true (default) | false ]
completionActionOption="${6:-"wait"}"     # [ wait | sleep (with seconds) | Shut Down | Restart
policyArrayJSONURL="$7"                   # [https://your.available.url.json]

# Remediate Jamf Protect
protectTenant="$4"
protectGUID="$5"
```



Computers : Policies

← Jamf Variables

Options | Scope | Self Service | User Interaction

- General
- Packages
  0 Packages
- Software Updates
  Not Configured
- Scripts
  1 Script
- Printers
  0 Printers
- Disk Encryption
  Not Configured
- Dock Items
  0 Dock Items
- Local Accounts
  0 Accounts
- Management Accounts
  Not Configured
- Directory Bindings
  0 Bindings

Scripts

Jamf Variables

Priority Priority to use for running the script in relation to other actions

After ▾

Parameter Values Values for script parameters. Parameters 1–3 are predefined as mount point, computer name, and username

Company

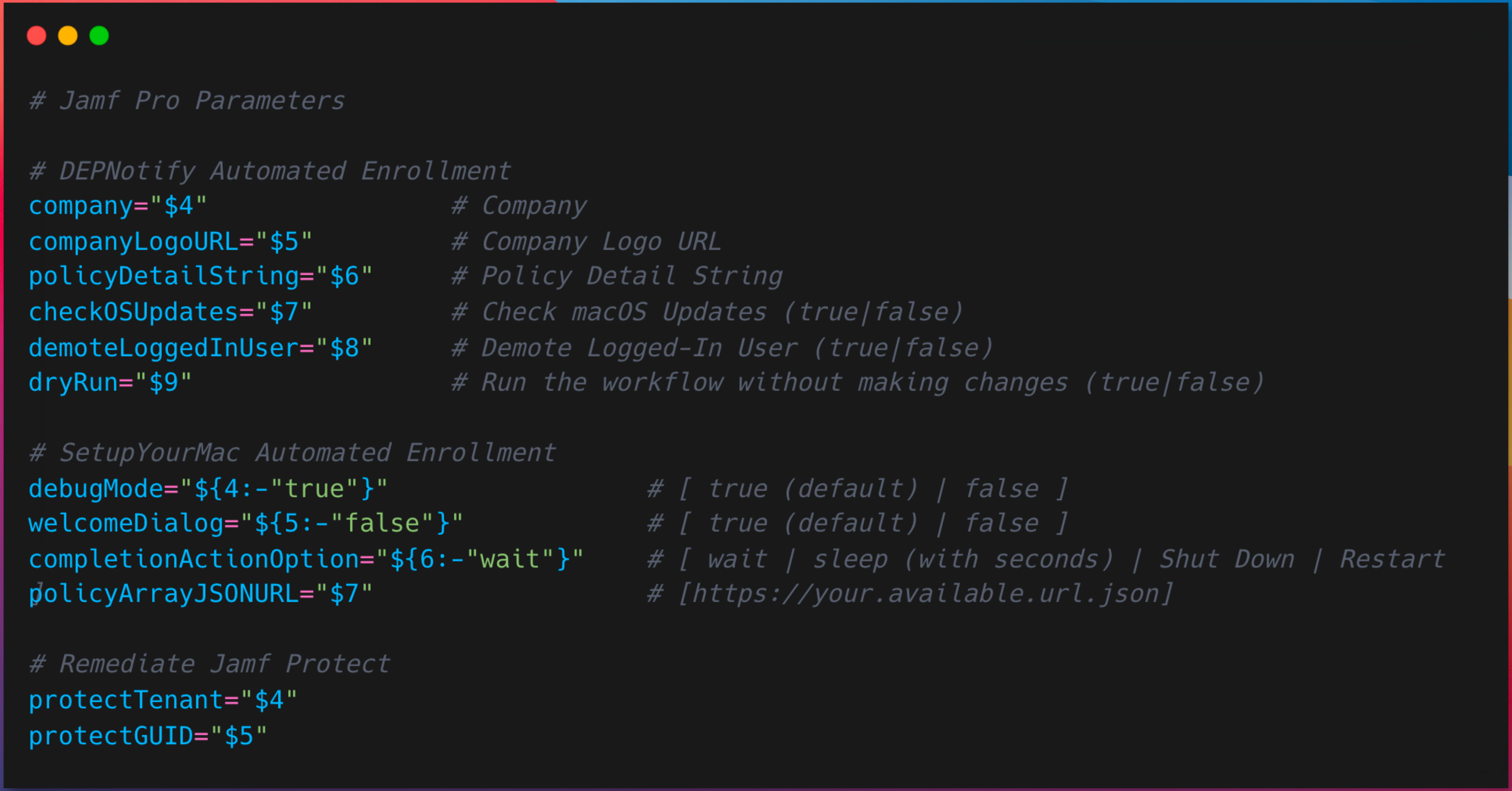
Company Logo URL

Policy Detail String

Check macOS Updates (true|false)

Demote Logged-In User (true|false)

Run the workflow without making changes (true|false)



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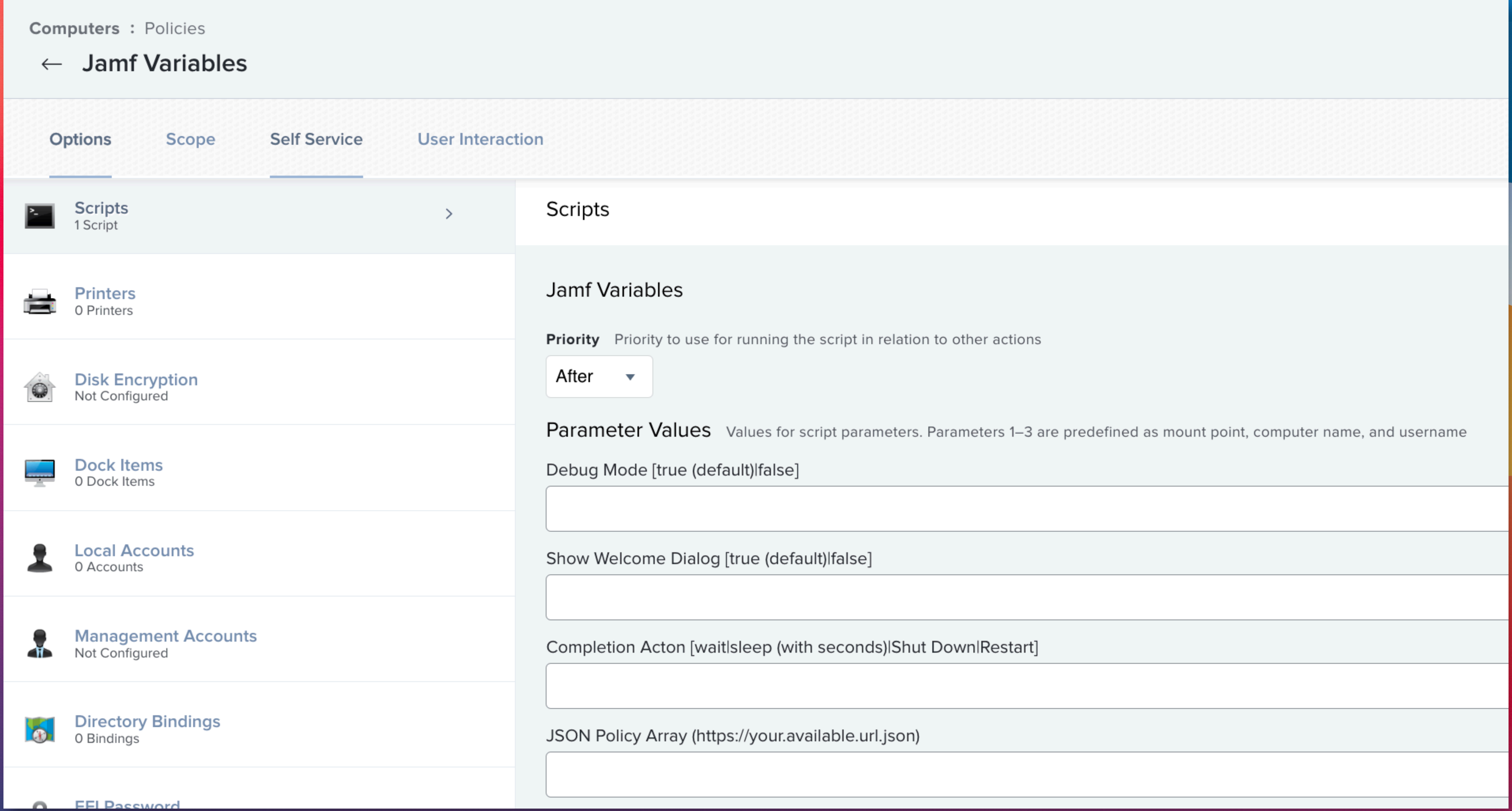


Computers : Policies

← Jamf Variables

Scripts
1 Script

Printers
0 Printers

Disk Encryption
Not Configured

Dock Items
0 Dock Items

Local Accounts
0 Accounts

Management Accounts
Not Configured

Directory Bindings
0 Bindings

EFI Password

Scripts

Jamf Variables

Priority Priority to use for running the script in relation to other actions

After ▾

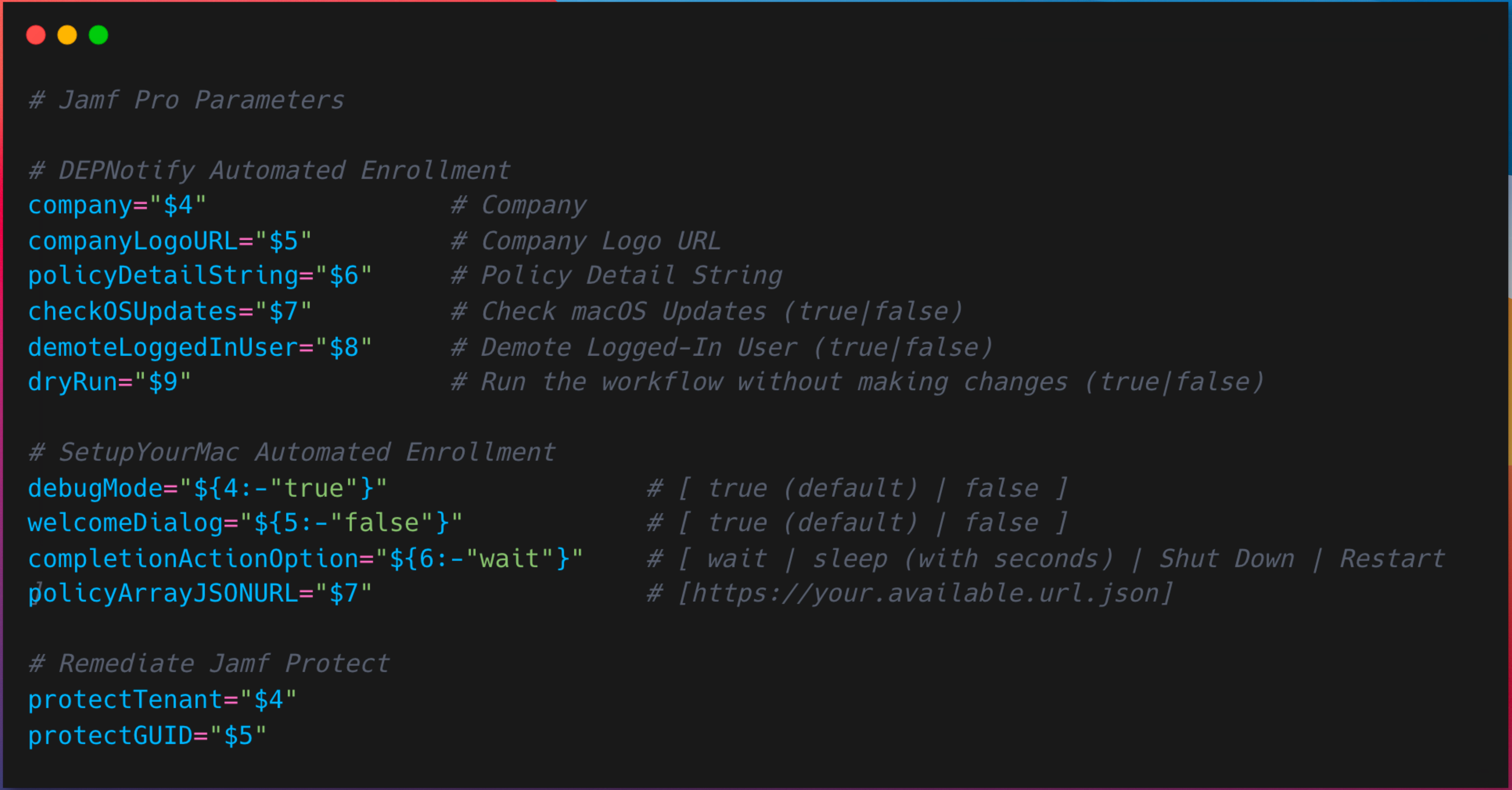
Parameter Values Values for script parameters. Parameters 1–3 are predefined as mount point, computer name, and username

Debug Mode [true (default)|false]

Show Welcome Dialog [true (default)|false]

Completion Acton [wait|sleep (with seconds)|Shut Down|Restart]

JSON Policy Array (https://your.available.url.json)



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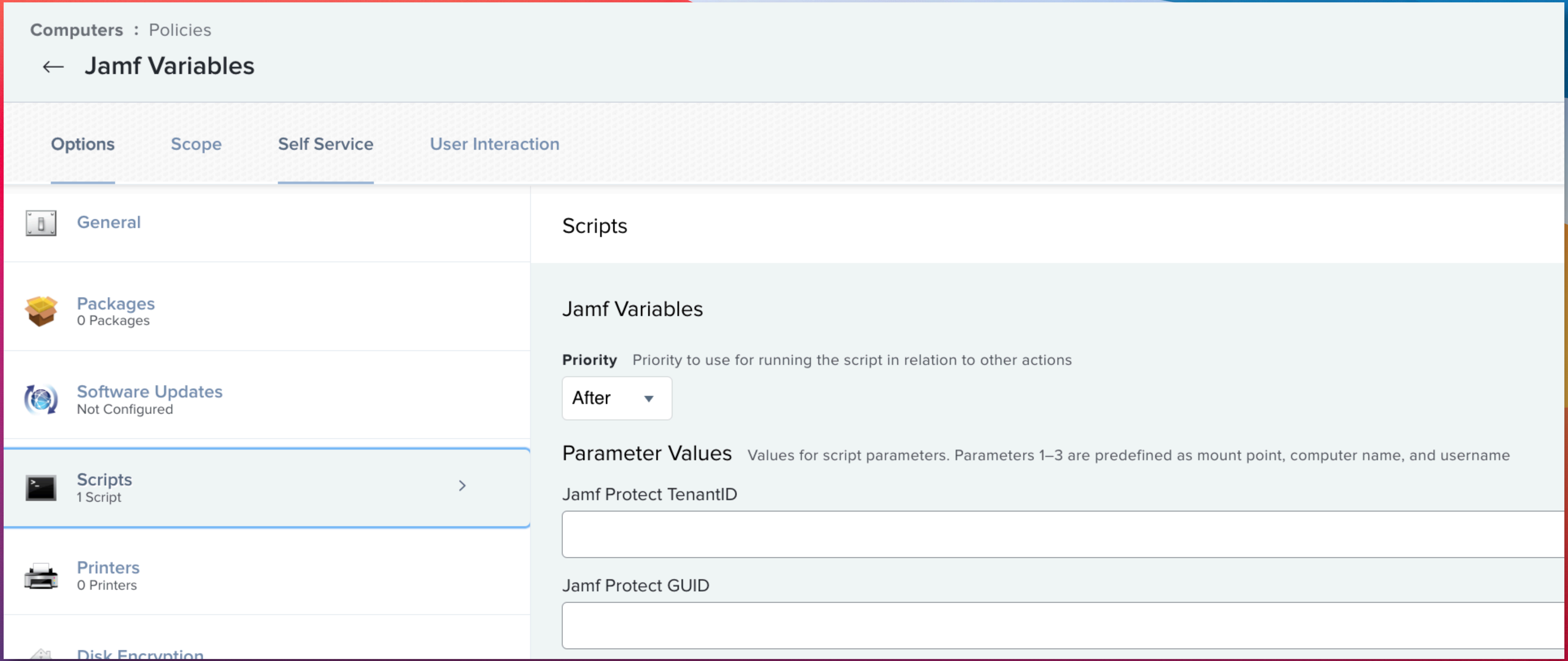


Computers : Policies

← Jamf Variables

Scripts

Jamf Variables

Priority Priority to use for running the script in relation to other actions

After ▾

Parameter Values Values for script parameters. Parameters 1–3 are predefined as mount point, computer name, and username

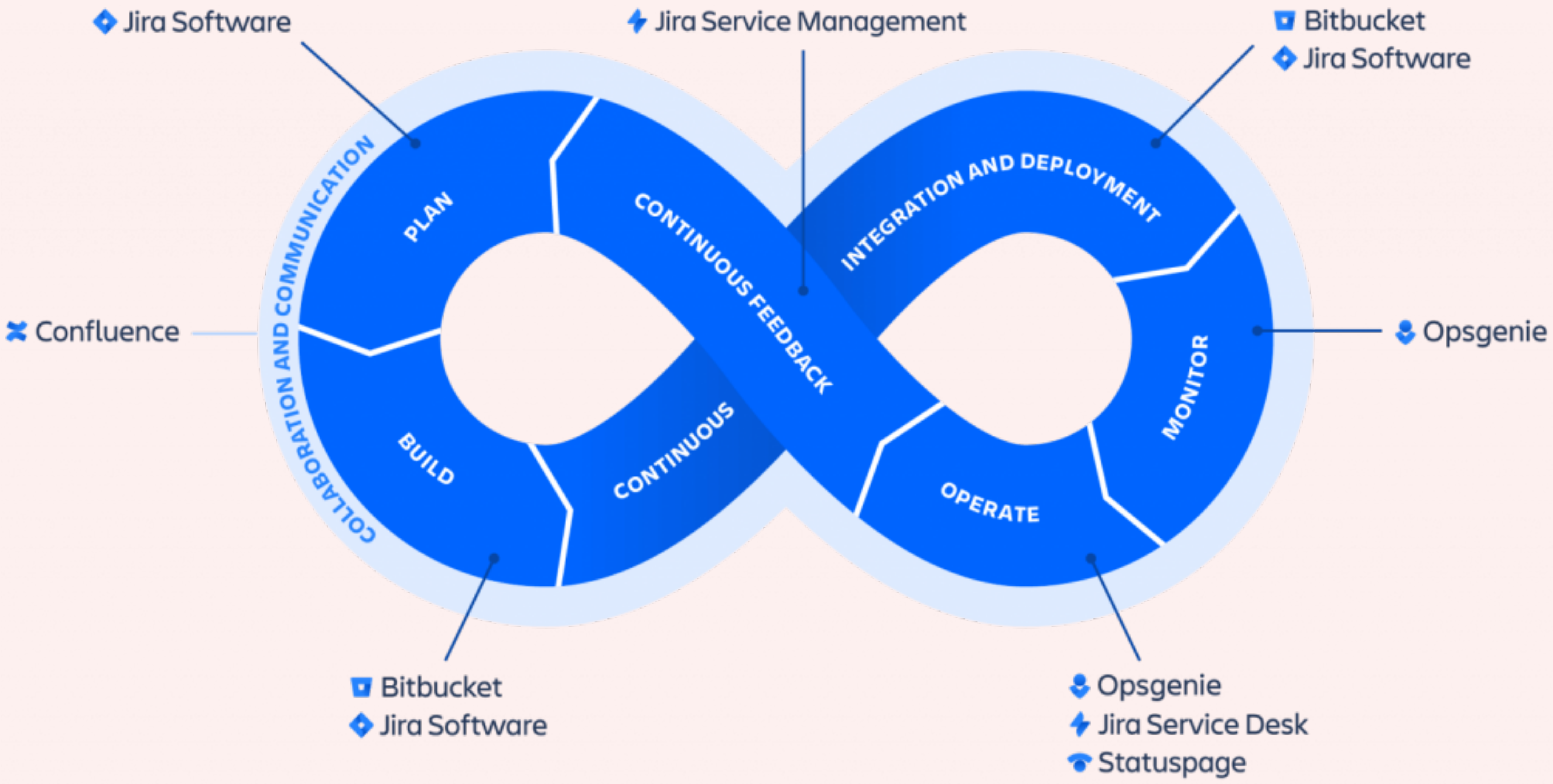
Jamf Protect TenantID

Jamf Protect GUID

Problem: Ch-ch-ch-ch-changes

Problem: Ch-ch-ch-ch-changes

We are doing all of this, but we need to keep a record of all the changes. Something new is out, what do we do?



Continuous Improvement

Internal tracking, Apple community involvement, organizational tools

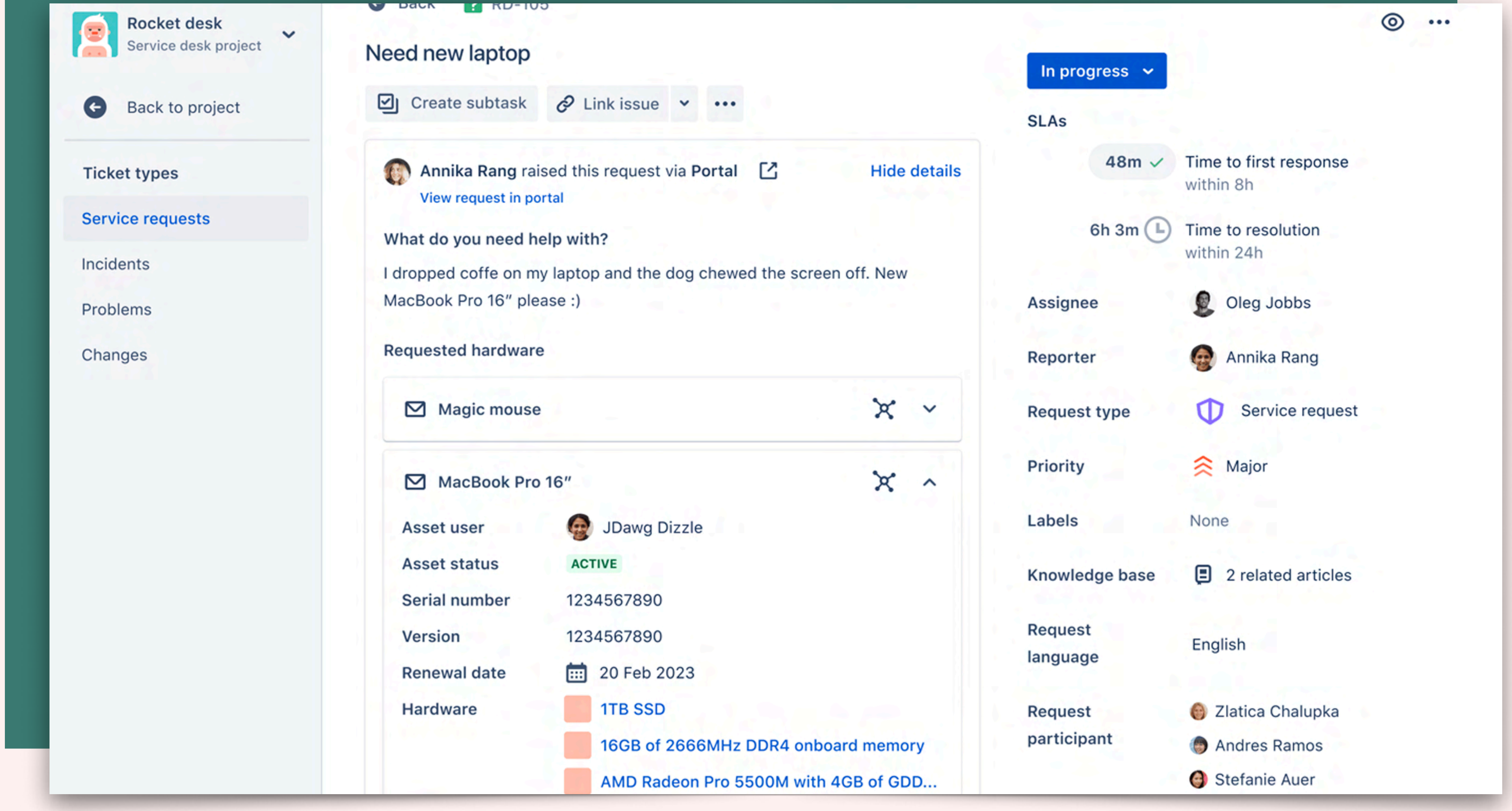
MacAdmins Slack

GitHub

JamfNation

Improvement

- Ticket Tracking
- Sprints
- Code Review
- Projects
- Documentation



Need new laptop

Annika Rang raised this request via Portal — Hide details

View request in portal

What do you need help with?

I dropped coffe on my laptop and the dog chewed the screen off. New MacBook Pro 16" please :)

Requested hardware

Magic mouse

MacBook Pro 16"

Asset user	JDawg Dizzle
Asset status	ACTIVE
Serial number	1234567890
Version	1234567890
Renewal date	20 Feb 2023
Hardware	1TB SSD 16GB of 2666MHz DDR4 onboard memory AMD Radeon Pro 5500M with 4GB of GDD...

SLAs

48m ✓ Time to first response within 8h

6h 3m Time to resolution within 24h

Assignee	Oleg Jobbs
Reporter	Annika Rang
Request type	Service request
Priority	Major
Labels	None
Knowledge base	2 related articles
Request language	English
Request participant	Zlatica Chalupka Andres Ramos Stefanie Auer

We made it easy

All of our open source tools that we talked about today are available in our GitHub:

- Jamf Pro Setup Sample Documentation
- git4jamfpro *
- Jamf Pro Notifications Alerter *
- Sample Modular Scripts

ATLASSIAN
Bitbucket

circleci

GitHub

Thank You

We'd love to connect and discuss this topic more!

Visit alectrona.com/MacAdmins2023

for this presentation and more info!

Give us feedback on today's talk:

https://bit.ly/psumac2023-152

Ryan Ball, Director of Engineering

linkedin.com/in/ryangball

ryan@alectrona.com

Sam Gibbs, Mac Consulting Engineer

linkedin.com/in/sam-gibbs11

sam@alectrona.com

Andrew Myers, Mac Consulting Engineer

linkedin.com/in/amyers22

andrew@alectrona.com

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